Aalto University
School of Business

# GULF CARRIERS AGAINST THE TREND?

## A conceptual framework of motivations and downsides related to joining multi-partner alliances in the airline industry

Master's Thesis
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Management and International Business
2016

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**Abstract of master's thesis**

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| **Title of thesis** | Gulf carriers against the trend? A conceptual framework of motivations and downsides related to joining multi-partner alliances in the airline industry |
| **Degree** | M.Sc. Economics and Business Administration |
| **Degree programme** | Management and International Business |
| **Thesis advisor(s)** | Heli Nissilä |
| **Year of approval** 2016 | **Number of pages** 85 **Language** English |

**Abstract**

Close to two-thirds of the global passenger air traffic is handled by the three global airline alliances: Star Alliance, OneWorld, and SkyTeam. The residual traffic is handled by non-aligned carriers, including two of the most successful airlines of recent years: the gulf carriers Etihad Airways and Emirates. Both airlines are very fastidious in terms of partner selection and voice several concerns in regards to global airline alliances. Considering the importance and success of these alliances in the aviation industry, these positions seem paradox. Several studies exist that summarize motivations and downsides of joining an alliance, but, at the same time, the literature is lacking a systemic synthesis of perceived benefits and perils.

This study contributes to existing literature by generating a summary of the extensive body of knowledge on strategic alliances and synthesizing its perspectives on the motivations and downsides of allying; a domain that has not been addressed previously. In addition, the analysis has not only yielded insights to the different motivations and downsides of joining an alliance, but also to the theoretical lenses most commonly used when analyzing the motives and downsides. Moreover, a step further is taken to evaluate the applicability of this literature and its insights concerning the motivations and downsides of allying to the specific context of aviation. Based on theoretical insights and an empirical case study of the gulf carriers, propositions concerning the criteria that influence the company-specific decision related to allying and factors influencing the design/ structure and outcome of the cooperation are developed. Multiple sources of evidence are used in the case study, such as interview transcripts, reports from leading industry magazines, newspaper articles, and the annual reports of the companies involved.

The multiple-case study suggests that the risk of partner dependency and management specific views are important factors for the gulf carriers and influence the decision to (not) join an alliance. While prior literature gives little indication, which factors specifically influence the airline's perception of motivations and downsides in the aviation industry, this study hypothesizes several underlying factors for the alliance decision, namely: the airline cost structure, network structure, target passenger group, alliance type, alliance governance, and partner characteristics. The study also provides some practical insights for management: the most likely scenario of the further evolvement of the airline industry seems to be a slow, but steady, deregulation of the industry, while joint venturing and closer collaboration becomes increasingly important. The study proposes that it is important for management in the airline business to closely observe the developments and assess the increasingly feasible option to joint venture, which was not available when the global airline alliances were founded.

**Keywords** strategic alliances, multilateral alliances, multi-partner alliances, motivations, upsides, motives, downsides, cooperation, aviation, airline, gulf carrier, network carrier

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# 1 Introduction

The market share of alliances in the aviation industry is exceptionally high. Close to two-thirds (63.8%) of the global passenger air traffic is handled by the three global airline alliances: Star Alliance (24.0%), OneWorld (19.0%) and SkyTeam (20.8%) (Dunn, 2015). The residual 36.2% is handled by non-aligned carriers, including two of the most successful airlines of recent years: gulf carriers[1] Etihad Airways and Emirates. The group of "gulf carriers" describes the three major carriers based in the gulf region and, besides the aforementioned Etihad Airways and Emirates, includes Qatar Airways (Dresner, Eroglu, Hofer, Mendez, & Tan, 2015; Squalli, 2014). Instead of joining a global airline alliance, like the majority of major carriers do, Etihad Airways and Emirates build their own partner networks, while being very fastidious in terms of partner selection. Emirates voices the concern that joining a global airline alliance would be a threat to its independence, flexibility, reputation and high quality of service, while Etihad Airways promotes its strategy of specific investments in strategically important regions (Heasley, 2010; Hogan, 2013).

Considering the importance and success of the global airline alliances in the aviation industry, these positions seem paradox. Interestingly, this is not simply due to the carriers' location in the gulf area, as the also successful third gulf carrier Qatar Airways is a member of the oneworld alliance. This suggests that there are more criteria influencing the strategic decision of Etihad Airways and Emirates to go against the trend and not join a global airline alliance than merely the location.

Research has examined different motivations and downsides of joining bilateral and multilateral strategic alliances that might be of relevance for carriers facing the decision to either join a global airline alliance or stay autonomous. On the one hand, Mariti and Smiley (1983) suggest economies of scale as an important motive to cooperate, Kogut (1988) proposes that firms try to change the competitive landscape through collusion, and Dyer and Singh (1998) suggest knowledge exchange as a motive for allying. Furthermore, Barney, Wright, and Ketchen (2001) emphasize the importance of access to new resources and Baum, Calabrese, and Silverman (2000) name uncertainty avoidance and the sharing of operational risks as very important factors. On the other hand, Hamel (1991) cautions for

[1] The term gulf carrier, as it is used in this study, is also referred to as the Middle East big three carriers or MEB3 and can be used interchangeably.

unintended knowledge transfer, Gomes-Casseres (1994) names the burden of negotiating decisions and difficulties in coordination, and Gulati (1998) mentions opportunism as a potential risk of an alliance. Overall, collaboration in the form of a strategic alliance is seen positively and therefore suggests that this form of cooperation is beneficial for carriers.

Although several studies exist that summarize motivations and downsides of joining an alliance (e.g. Dong & Glaister, 2006; Glaister & Buckley, 1996; Hagedoorn, Link, & Vonortas, 2000; Nielsen, 2003), the literature is lacking a systemic synthesis of perceived benefits and perils. First, the downsides of allying are undervalued, and there is an obvious contradiction between theory and what can be seen to happen in the industry empirically. Second, the theory on the benefits of allying stems from diverse streams, and a synthesis of literature based on a coherent theoretical base is still missing. However, this knowledge is fundamental for future research in the field of strategic alliances. It fills the research gap of to what extent, and how, these motivations and downsides apply to the gulf carriers.

Recent research in the field of air transportation has analyzed the effect of gulf carriers on US airlines (Dresner et al., 2015) and German airlines (Grimme, 2011), the impact of aviation growth in the middle east and its effect on the strategies of network carriers (Vespermann, Wald, & Gleich, 2008), the effect of complementary and substitute network resources on alliance value (Wassmer, Li, & Madhok, 2015), and the effects of joining a strategic alliance on airline efficiency, productivity and profitability (Lin, 2013). Only very few sources, such as Button, Haynes, and Stough (1998) and Morrish and Hamilton (2002), provide examples for the motivations of joining an alliance. They suggest market access through codeshares[2] or the operation of a partner's routes, higher load factors through new traffic feeds from a partner's flights, and improvements through shared operations, e.g. IT, ground operations, or marketing. The three global airline alliances themselves communicate that they provide these benefits and, for example, promote joint customer benefits, brand strengthening, as well as cost savings, and improved efficiency through joint initiatives (oneworld, 2016; SkyTeam, 2014b; Star Alliance, 2015).

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[2] A codeshare agreement, allows airlines to offer flights under their name that are operated by a partner airline (codesharing partner). This offers passengers a larger variety of destinations while maintaining a simple booking process.

However, it is notable that the leadership teams from Emirates and Etihad Airways oppose the view of existing research and of the global airline alliances and propose the paradox argumentation that global airline alliances hinder growth and limit flexibility rather than enable and increase it, respectively. This raises the question of what the (potential) motivations and downsides of joining a global airline alliance are, how they can be explained theoretically, and to what extent their applicability may vary between different carriers.

The study contributes to existing literature by generating a meta-analysis of the extensive body of knowledge on strategic alliances and synthesizing its perspectives on the motivations and downsides of allying; a domain that has not been addressed previously. Moreover, a step further is taken to evaluate the applicability of this literature and its insights concerning the motivations and downsides of allying to the specific context of aviation. Based on theoretical insights and an empirical case study of the gulf carriers, propositions concerning the criteria that influence the company-specific decision related to allying are developed. Furthermore, propositions concerning factors influencing the design, structure and outcome of the cooperation are deduced.

This study is structured as follows: In chapter 2, a thorough systematic literature review is conducted in order to identify motives and downsides, as well as important alliance design decisions and parameters, such as the institutionalization, partner selection, governance and the similarities and differences in multilateral alliances. In chapter 3, important background information of the aviation industry is presented. This part covers the evolution of the industry, and highlights recent developments and the impact of deregulation and government subsidies. Next, the concepts of network and gulf carriers will be defined including any alliance specificities relevant to their operating model, such as their network setup and expansion strategies. Finally, the cooperative structure of the aviation industry is characterized and enriched with a description of the practicalities of and the difference between the three global airline alliances.

Based on these insights, a conceptual framework of motivations and downsides related to joining multi-partner alliances will be developed in chapter 4, which is then applied to the individual gulf carriers in the form of a multiple-case study. The results are then summarized and discussed with regard to underlying key factors, while propositions are developed. Finally, a summary of the results and potential for future research in this field is evaluated, including short evaluation of practical implications.

## 2 Past research on strategic alliances

The formation of strategic alliances can be differentiated in a sequence of actions and decisions. First, the general decision to form an alliance needs to be made, based on the thorough evaluation of benefits and downsides that come with the alliance (Gulati, 1998). After the motives and downsides are evaluated and the general decision to form an alliance is made, the next step in the sequence of setting up an alliance is deciding on the right institutionalization and selecting a partner with a good fit. Finally, the alliance needs to be set up and adapted continuously during its evolution (Gulati, 1998). This literature review is structured according to the previously described steps of the process, with an emphasis on the motives and downsides because of the previously identified research gaps and the goal of the study.

As described above, to understand why some gulf airlines avoid alliances, it is necessary to conduct an analysis of existing strategic alliance literature and to understand the motivations and downsides of joining an alliance from the perspective of different established theories. For this, an approach, similar to that used by Provan, Fish, and Sydow (2007) and Wassmer (2008), is followed. As a first step, peer-reviewed journal articles were researched in the “business source complete” of the search engine EBSCO with at least one of the following keywords:

*strategic alliance benefits; strategic alliance advantages; strategic alliance objectives; strategic alliance motives; strategic alliance motivations; strategic alliance risks; strategic alliance downsides; strategic alliance costs*

These keywords were identified during an initial screening of relevant alliance literature. The search engine automatically searches for singular and plural forms of the search terms. The results were filtered to only include articles from the time span of the last 20 years (from 1995 to 2015), a time span that is, according to Wassmer (2008), often used in literature reviews and therefore also used in this paper. This search yielded 2,027 results overall. The search was then narrowed further down by limiting the results to journals with an A-ranking or higher, according to the VHB-JOURQUAL3[3]. In the second step, titles and abstracts of the identified articles were evaluated in terms of relevancy to the research problem. In case the title and abstract were inconclusive, a screening of the paper was conducted in order to determine its relevancy. Articles with irrelevant content were dismissed. In the third step, relevant articles were reviewed and systematically analyzed in terms of study type (e.g. empirical, theoretical or practitioner oriented), research question and problem, theoretical explanation used by the paper, focus (e.g. bilateral or multilateral), findings of the study, relevant implications for the research question of this paper, and a summary of the motivations and/ or downsides identified. In addition, highly relevant references to studies that were not included in the search results were noted and analyzed later according to the same scheme to ensure no key insights were overlooked.

## 2.1 Classification and definitions

Despite the fact that strategic alliances have been a strong research focus in the recent past, there is not yet a uniform definition. However, there is a general agreement on the main characteristics. Hence, for this master's thesis the definition of "strategic alliance", according to one of the most cited sources, is a "voluntary arrangement between firms involving exchange, sharing, or co-development of products, technologies, or services. [Strategic alliances] can occur as a result of a wide range of motives and goals, take a variety of forms, and occur across vertical and horizontal boundaries" (Gulati, 1998, p. 293). When it comes to multiple alliances, the inconsistency of terms is even bigger. Therefore, in this study, the term "multilateral alliance" is used to describe formalized arrangements between multiple firms with a broad scope, while alliance networks are rather informal webs of bilateral connections between firms (Doz & Hamel, 1998; Lazzarini, 2008). From the perspective of one single airline, an alliance portfolio describes "a set of discrete bilateral alliances" with different partners (Doz & Hamel, 1998, p. 222).

## 2.2 Theoretical perspectives on strategic alliances

The results of the literature review depicted in Table 1 show that the most common theories, used by scholars to explain the formation of strategic alliances, are the resource-based

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[3] The VHB-JOURQUAL is a journal ranking of the parent organization of German university professors in the area of business administration "Verband der Hochschullehrer für Betriebswirtschaft e.V." (VHB). The most recent version 3 of the VHB-JOURQUAL, which was used for this study, can be accessed via: http://vhbonline.org/service/jourqual/vhb-jourqual-3/teilrating-abwl/

view, organizational learning, social network theory and transaction cost theory. Besides these central theories, researchers use arguments from strategic management (such as competitive force and dynamic capabilities), the knowledge-based view, the real options theory and the agency theory.

**Table 1: Theoretical perspectives on motivations and downsides in strategic alliance literature**

| Theoretical lens | Study |
|---|---|
| Resource-based view | Ahuja (2000); Barney et al. (2001); Baum et al. (2000); Chung, Singh, and Lee (2000); S. Das, Sen, and Sengupta (1998); Dyer and Singh (1998); Eisenhardt and Schoonhoven (1996); Gopalakrishnan, Scillitoe, and Santoro (2008); Hitt, Dacin, Levitas, Arregle, and Borza (2000); Hitt, Nixon, Clifford, and Coyne (1999); Mowery, Oxley, and Silverman (1996); Shan, Walker, and Kogut (1994); Stuart (2000); Teng (2007); Vandaie and Zaheer (2014); Wang and Zajac (2007) |
| Organizational learning | Baum and Oliver (1991); Dyer and Nobeoka (2000); Glaister and Buckley (1996); Hagedoorn et al. (2000); Heimeriks, Duysters, and Vanhaverbeke (2007); Kale, Singh, and Perlmutter (2000); Larsson, Bengtsson, Henriksson, and Sparks (1998); Lavie, Lechner, and Singh (2007); Luo and Deng (2009); Sakakibara (1997) |
| Social network theory | Ahuja (2000); Ahuja, Polidoro Jr, and Mitchell (2009); Burt (2009); Chung et al. (2000); Gomes-Casseres (1994); Lazzarini (2007); Luo and Deng (2009); Mitchell and Singh (1996); Ozmel, Reuer, and Gulati (2013); Soh (2010); Stuart (2000); Stuart and Podolny (1996) |
| Transaction cost theory | T. K. Das and Teng (1996); Glaister and Buckley (1996); Gulati (1995); Hagedoorn et al. (2000); Hennart (1991); Hoetker and Mellewigt (2009); Luo and Deng (2009); Mudambi and Tallman (2010); Nooteboom, Berger, and Noorderhaven (1997); Parkhe (1993); Wassmer (2008) |
| Knowledge-based view | Grant and Baden-Fuller (2004); Mowery et al. (1996); Wang and Zajac (2007) |
| Real options theory | Folta (1998); Kogut (1991); Reuer and Tong (2010) |
| Agency theory | Ozmel et al. (2013); Reuer and Ragozzino (2006) |
| Dynamic capabilities | Hagedoorn et al. (2000) |
| Evolutionary economics | Singh and Mitchell (1996) |
| Game theory | Parkhe (1993) |
| Industrial organization economics | Hagedoorn et al. (2000) |
| Social capital theory | Gopalakrishnan et al. (2008) |
| Other economics | Arora and Gambardella (1990); Bourdeau, Cronin Jr, and Voorhees (2007); Coombs and Deeds (2000); Hamel, Doz, and Prahalad (1989); Inkpen (2000); Khanna, Gulati, and Nohria (1998); Mitchell, Dussauge, and Garrette (2002); Singh (1997); Singh and Mitchell (2005) |

The majority of studies are empirical in nature, and determine the alliance outcomes measured on the basis of one objective (e.g. knowledge sharing). Determining specific motives and downsides and their impact is seldom the main focus of a study (Glaister & Buckley, 1996; Sakakibara, 1997).

Some of these studies integrate two or more theories. Most common is a combination of the resource-based view and social network theory (Ahuja, 2000; Chung et al., 2000; Gopalakrishnan et al., 2008; Stuart, 2000), but also a combination of organizational learning and transaction costs is applied (Glaister & Buckley, 1996; Luo & Deng, 2009). It is not surprising that there are also combinations of the resource-based view and knowledge-based view, as the latter is an advancement of the resource-based view (Mowery et al., 1996; Wang & Zajac, 2007). Finally, Ozmel et al. (2013) integrate the agency theory and social network theory in their study.

The most common theoretical perspective used to analyze motivations and downsides of alliances is the resource-based view. This theory describes organizations as a bundle of strategically relevant resources, with which they are unequally equipped and the difference in this resource endowment is not easy to overcome. However, companies try to assimilate and combine resources that are valuable, rare, imperfectly imitable and non-substitutable to achieve a sustainable competitive advantage (Barney, 1991). Since resources with these configurations are hard to come by, organizations opt for inter-organizational cooperation to get, share, and exchange these strategically important resources. An alliance between companies can be a good way to access these resources quickly and also tap unused resources. Depending on a company's resource endowment, varying institutionalizations may be appropriate (T. K. Das & Teng, 2001).

In contrast to this approach, the organizational learning theory suggests that learning in an organization is constituted by behavioral changes through the organization's processing of information and experience (Fiol & Lyles, 1985; Huber, 1991). It is rooted in the fields of psychology and cognitive research. The diffusion of knowledge in the organization happens by making the learning of the individual available to a broader audience, through storing and sharing. Different types of learning are present in organizational theory. Single-loop learning is non-strategic in nature and is described as the lower-level learning, where errors are detected and corrected without a policy change. In comparison, the second type, double-loop learning, is a higher-level learning type and strategical in nature. When an error is detected and corrected, the organization evaluates and adapts its established norms, procedures, policies, and objectives. This requires changes to the company's knowledge-base and competencies that are specific to the firm. Understanding how to foster learning facilitates the promotion of a learning culture within an organization (Argyris & Schön, 1996). The concept of the learning organization is closely related to organizational learning theory and describes a firm that maximizes organizational learning through appropriate structures (Simonin, 1997).

The third major relevant theoretical framework is the social network theory, which looks at how the embeddedness of participants within a network influences their own actions and outcomes, as well as others' actions. Social network theory is positioned in between the polar opposites of the under-socialized view, meaning that the actions of an individual are completely based on the pursuit of self-interest, and the over-socialized view, meaning that the actions of an individual are completely based on societal values and norms (Granovetter, 1985). The social network theory can be applied to both the organizational level (e.g. alliances and joint ventures) and the individual level (e.g. career choices and aspirations). The key concept within the social network theory is social capital. It describes the resources that can be mobilized through the embeddedness of the actor within the (strategic) network, which enables the actor to access resources (e.g. information, knowledge or tangible goods) (Adler & Seok-Woo, 2002; Burt, 1997; Nahapiet & Ghoshal, 1998). The homogeneity or heterogeneity of the resources that can be accessed is determined by the network structure: the relation of strong to weak ties. Strong ties, often based on cohesive contacts and an equivalent mindset, tend to provide redundant resources, but also facilitate trust between the partners in the network (Burt, 1997; Coleman, 1988, 1990). As opposed to high closure, a brokerage position in the network offers the chance to bridge structural holes and therefore connect previously unconnected segments of the network. In this case, weak ties offer a greater variety of different resources, as they are based on non-redundant contacts. (Burt, 1997, 2009; Granovetter, 1983). In the case of an alliance, the position within the network determines the heterogeneity of resources that can be accessed by a company. In order to be successful, Burt (2001, 2009) notes that both cohesiveness as well as the bridging of structural holes is essential for alliance success.

Finally, the transaction cost theory suggests that the cost-optimal decision, in the case of no transaction costs, is buying instead of making (Williamson, 1979). The individual's behavior is embossed by limited rationality and opportunism. Three characteristics determine the transaction costs: the frequency, uncertainty, and specificity of the exchanged goods. The more unfavorable these characteristics are, the more it makes sense to accept governance costs, for example in the form of a strategic alliance, in order to decrease transaction costs. The administrative costs of a transaction are the highest if a hierarchy is present. In the case of a market transaction, administrative costs are at their lowest, though the requirements in regards to the three characteristics are at their highest (Williamson, 1991). A strategic alliance is a hybrid form of market and hierarchy. Research differentiates between explicit knowledge, e.g. patents or designs, and implicit knowledge, e.g. know-how among employees. The transfer and integration of these intangible assets is a highly complex process, with high transaction costs due to high uncertainty, because it is impossible to cover every possible variation in a contract. Because of that, alliances are generally superior to market contracts in integrating knowledge, especially under higher degrees of uncertainty (Grant & Baden-Fuller, 2004; Hagedoorn et al., 2000).

## 2.3 Motivations for strategic alliances

Research has provided a wide range of motives for joining an alliance. While some of the motives appear frequently, others overlap to a certain extent or are mentioned/ identified by only a few authors. Table 2 on the next page gives an overview of the categories, motives and studies that reference them. Of the studies analyzed, 57.2% analyzed the motivations, 28.5% analyze both motivations and downsides and only 14.3% focus on downsides of allying. To provide a better overview, this paper uses four categories to cluster the motives according to their aims: innovation, market consolidation, business expansion, and business operation. The category innovation includes all motivations related to new product development and knowledge sharing. The market consolidation category includes those that aim at changing the market environment by increasing the company's market power and/ or position through cooperation with other companies. Business expansion related motives include new market entries, as well as international expansion and all factors associated with these. Finally, business operation includes motivations that influence the day-to-day business of the company, such as marketing alliances or shared services.

**Table 2: Motivations in strategic alliance literature**

| Cat. | Motive | Study |
|---|---|---|
| Innovation | Share knowledge and capabilities<br>Exchange complementary assets<br>Distribute risks and share costs | Ahuja (2000); Arora and Gambardella (1990); Barney et al. (2001); Chung et al. (2000); Eisenhardt and Schoonhoven (1996); Glaister and Buckley (1996); Gopalakrishnan et al. (2008); Hagedoorn et al. (2000); Hennart (1991); Hitt et al. (1999); Nooteboom et al. (1997); Stuart (2000); Teng (2007); Vandaie and Zaheer (2014); Wang and Zajac (2007) |
| Consolidation | Improve legitimacy and reputation<br>Influence competitive landscape<br>Ensure opportunity to acquire target | Baum and Oliver (1991); Bourdeau et al. (2007); Chung et al. (2000); Eisenhardt and Schoonhoven (1996); Folta (1998); Glaister and Buckley (1996); Hagedoorn et al. (2000); Hamel et al. (1989); Lazzarini (2007); Nooteboom et al. (1997); Ozmel et al. (2013); Soh (2010); Stuart (2000) |
| Expansion | Enter new markets<br>Expand internationally<br>Conform to foreign government policy | Baum et al. (2000); Glaister and Buckley (1996); Kogut (1991); Nooteboom et al. (1997); Reuer and Ragozzino (2006); Reuer and Tong (2005); Singh and Mitchell (2005) |
| Operation | Increase efficiency and realize synergies<br>Share capital | Glaister and Buckley (1996); Gopalakrishnan et al. (2008); Gulati (1999); Hagedoorn et al. (2000); Kogut (1991); Mitchell et al. (2002); Reuer and Ragozzino (2006); Sakakibara (1997) |

A more detailed explanation of the motives is set out below according to the structure of table 2.

## Innovation

*Share knowledge and capabilities*

Alliances allow companies to share their complementary skill sets and talents which can cover a broad variety of different areas and ultimately lead to a competitive advantage (Eisenhardt & Schoonhoven, 1996). This new and unique combination of knowledge has the potential to lead to the development of new products and services that one company alone could not have done (Contractor & Lorange, 1988). This combination can furthermore realize a significant decrease in new product development times, and it becomes especially interesting if the companies operate in different industries (Gomes-Casseres, 1994). From a transaction cost theory perspective, Grant and Baden-Fuller (2004) point out that knowledge integration processes in an alliance are generally much more efficient than market contracts, only inferior to a single firm. In the case of a multilateral alliance, firms can profit from the broad range of knowledge of the companies involved, as it is stored and can be accessed by an individual firm on the network level (Dyer & Nobeoka, 2000).

*Exchange and access complementary assets*

Strategic alliances, in research, are often mentioned to be a means to exchange and access complementary assets, because the access of all assets necessary for the production of a certain good without partners is hard to accomplish (Chung et al., 2000; Gomes-Casseres, 1994). As suggested by the resource based view, the decision to ally can be based on the objective to be competitive in a particular market (Hitt et al., 1999). Especially if the needed factors are not available through arms-lengths transactions and require a long time to build up, alliances can be very effective to obtain access to these assets. In general, this kind of alliance is more likely to be set up if both companies have assets to offer that the other company needs (Ahuja, 2000). In addition, companies can prefer alliances, "because the investment or long term commitment is less than that required in acquisitions" (Barney et al., 2001, p. 627).

*Distribute risks and share costs*

New product development or other ventures of a company into unknown terrains are often associated with immense risks of failure. Although a success would be very rewarding, companies opt to share the risks and costs with partners (Fuller & Porter, 1986; Gopalakrishnan et al., 2008). On the one hand, and in many such cases, the responsibilities within the alliance are very clearly separated. One company possesses the technology and skills necessary to develop the product, while the other has the capital and/ or resources to fund the project (Mariti & Smiley, 1983). On the other hand, if the companies have homogenous resources and skill sets, cost sharing (as a form of financial risk sharing) may be the dominant objective, especially in large projects (Sakakibara, 1997).

### Market consolidation

*Improve legitimacy and reputation*

By joining an alliance, companies accept that they are being associated with the other company. When entering a new market environment, this can be helpful, because “alliances convey endorsements” (Stuart, 2000, p. 808). An alliance membership can help to create awareness for the brand and to build public confidence in it, e.g. for potential customers, suppliers, and employees (Eisenhardt & Schoonhoven, 1996). The affiliation through an alliance with a prominent company or, in the case of a multilateral alliance, with a prominent alliance network, is also a signal of quality, because the partner risks its reputation for the alliance partner(s) (Ozmel et al., 2013). This becomes especially important for start-ups, which may have a superior product, but struggle to communicate their true qualities. According to Baum et al. (2000, pp. 269-270), “a new firm’s alliance [can] provide a significant buffer against the hazards typically faced by start-ups”. Furthermore, a partners’ good service quality is likely to spillover to the other partner(s), leading to an increase of the chance of reuse of the services of anyone of the partners (Bourdeau et al., 2007). A self-enforcing effect of allying can also be observed: companies that cooperate in the form of strategic alliances are more likely to use this form of cooperation when the transaction that is to be conducted has a high uncertainty and the other partner has a similar status (Chung et al., 2000).

*Influence competitive landscape*

Due to the combination of the partners’ strengths, strategic alliances can have a significant impact on the competition in an industry (Fuller & Porter, 1986). First, joining an alliance can have a positive impact on the market power. This is because, in a vertical alliance, the partner can also be the customer for the product, while in a horizontal alliance, “distribution channels and the buying power of the partners can be combined” (Eisenhardt & Schoonhoven, 1996, p. 139). The relational capital on the network level of a strategic alliance can, similar to the reputation and legitimacy motive, lead to further collaboration options and therefore also have a significant impact on the competitive landscape of an industry. In addition, if alliance partners promote their technologies, the critical mass needed for a product is more likely to be reached in a shorter amount of time, thereby significantly impacting other companies in the industry (Gomes-Casseres, 1994).

*Ensure opportunity to acquire target*

Alliances in the form of minority investments or joint ventures can also be used as a means to "ensure an opportunity to acquire a target firm or venture" (Folta, 1998, p. 1023). By not acquiring the target firm right away, the company is well positioned to profit from innovation activity and products without the complicated process of post-merger integration and furthermore limiting the exposure to operational risks of the target firm (Folta, 1998).

**Business expansion**

*Enter new markets*

From the previously mentioned motives, it is clear that alliances can be a good way to conduct complex R&D projects together and influence the industry's market environment. However, as companies with heterogeneous resources ally, they can also opt to evaluate and pursue new market/ industry opportunities (Mitchell et al., 2002; Reuer & Tong, 2010). Collaboration in this case can not only help start-ups to achieve better initial product sales, but also established players from other markets entering the market. After entering a new market, the formation of new alliances can further contribute to sustaining and increasing growth (Singh & Mitchell, 2005).

*Expand internationally*

International expansion is a challenging task for all companies due to the different market needs and local requirements. Therefore, it can be beneficial to find a local ally to support the expansion. Three different modes of international market entry are identified in past research: a company can opt to license its products or set up franchising entities, it can opt to enter into a joint venture with local companies, or it can choose to set up a local subsidy (Glaister & Buckley, 1996; Gomes-Casseres, 1994; Hill, Hwang, & Kim, 1990). The resource access aspect is critical for some international ventures, as they may be different in other national environments and cannot be easily accessed in the beginning. Alliances give the new market entrant more flexibility in this regard (Eisenhardt & Schoonhoven, 1996; Mitchell et al., 2002).

*Conform to foreign government policy*

Some countries require a local partner for expansion to that market, especially in the financial services, defense, and telecommunications industry. The motive to conform to foreign government is therefore one of the oldest in alliance history (Glaister & Buckley, 1996). Regulatory barriers of a country, i.e. the prohibition of establishing wholly owned subsidies, may therefore force the company to forge an alliance with a local partner in order to enter the domestic market (Gomes-Casseres, 1994).

**Business operation**

*Increase efficiency and realize synergies*

The alliance partners can combine and link their complementary competencies in order to integrate them and exploit synergies in various areas of their operation (Hagedoorn et al., 2000; Hitt et al., 2000; Miles & Snow, 1984). Dyer and Singh (1998, p. 662) argue that from a transaction cost theory point of view, an alliance provides a more effective governance mechanism than market transactions and therefore lowers the transaction costs involved by allowing "synergetic combinations of assets, knowledge, or capabilities". The only thing superior to this cooperation is internalizing the transaction.

*Share capital*

Similar to the motive of sharing R&D costs, where one company may provide the other with capital to conduct research on a certain project, capital for non-new product development related operations can also be provided as part of the alliance cooperation. This is especially interesting in highly capital intense industries like the aviation industry (Eisenhardt & Schoonhoven, 1996; Gulati, 1999).

## 2.4 Downsides of strategic alliances

The literature on downsides of strategic alliances is not as rich as the literature of the motives. However, several, distinct downsides have been identified during the literature review. Table 3 on the next page gives an overview of the categories, downsides, and the studies that refer to them, respectively.

**Table 3: Downsides in strategic alliance literature**

| Cat. | Downsides | Study |
|---|---|---|
| Inno-vation | Unintended knowledge transfer<br>Diminishing diversity of knowledge | Dyer and Nobeoka (2000); Hamel et al. (1989); Kale et al. (2000) |
| Consolidation/ Expansion | Partner dependence<br>Partner redundancy<br>Opportunistic behavior<br>Negative spillover | Baum and Oliver (1991); Bourdeau et al. (2007); Chung et al. (2000); Eisenhardt and Schoonhoven (1996); Folta (1998); Glaister and Buckley (1996); Hagedoorn et al. (2000); Hamel et al. (1989); Lazzarini (2007); Mudambi and Tallman (2010); Nooteboom et al. (1997); Ozmel et al. (2013); Soh (2010); Stuart (2000) |
| Operation | Underperformance<br>Coordination problems<br>Higher than anticipated mgmt. costs | Glaister and Buckley (1996); Gopalakrishnan et al. (2008); Gulati (1999); Hagedoorn et al. (2000); Kogut (1991); Mitchell et al. (2002); Reuer and Ragozzino (2006); Sakakibara (1997) |

Overall, the downsides can be clustered in the same categories as the motives. However, due to an overlap of the downsides and risks with regards to market consolidation and business expansion, these two categories have been combined. The category innovation includes all downsides associated with new product development and knowledge sharing. Market consolidation and business expansion related downsides include risks associated with changing market environments, partner dependence, and new (international) market entries. Finally, business operation includes motivations that influence the day-to-day business of the company, such as marketing alliances or shared services. A more detailed explanation of the downsides is set out below, according to the structure of the table.

### Innovation

*Unintended knowledge transfer*

Strategic alliances are very complex structures and not easy to control. In research, they are also described as incomplete contracts, due to the risk that property rights may not be clearly separated and the measurement of the contribution of each partner to the output is difficult. Alliance partners therefore face the risk of unintended transfer of critical knowledge and competencies (Baum et al., 2000; Kale et al., 2000). This leakage does not necessarily have to be due to the partners' opportunistic behavior, but can also be due to the fact that very important knowledge-transactions are generally "stuck four or five organizational levels below where the deal was signed" (Hamel et al., 1989, p. 136). This can lead to the unintentional leakage of knowledge in the course of personal interaction (Baum et al., 2000). However, the use of appropriate governance structures and integrated conflict management are expected to at least partially help dispel this risk (Kale et al., 2000; Williamson, 1991).

*Diminishing diversity of knowledge over time*

Dyer and Nobeoka (2000) point out that alliances need to continually reevaluate their alliance partners. The diversity of knowledge within the alliance network diminishes as partners work more closely together and will eventually adapt certain norms and behaviors. An alliance, built on the diversity of knowledge and resources will, in this case, lose its major benefit to the members.

**Market consolidation and business expansion**

*Partner dependence*

As mentioned earlier, using a partner's marketing, distribution network, or infrastructure is one of the main reasons companies choose to form/ join an alliance. However, the close collaboration also brings the risk of partner dependence with it, which might outweigh the short term gain from using the partners' resources and capabilities (Singh & Mitchell, 2005). Partners may find themselves locked in to the cooperation because of high switching costs associated with the exit (Nooteboom et al., 1997). As the contribution of distinct capabilities decreases, companies risk having to reveal more and more knowledge in order to remain attractive to the alliance partner(s) and find themselves in a "dependency spiral" (Hamel et al., 1989, p. 135).

*Partner redundancy*

Both a company that operates an alliance portfolio or the members of a multilateral alliance face the problem of partner similarity. A heterogeneous pool of information is critical for the success of an alliance. As soon as the threshold, until which similar partners contribute to a firms' or alliances' innovation activity, is reached adding more partners to the alliance can be very detrimental (Luo & Deng, 2009). As Baum et al. (2000) point out, the non-observance of partner diversity when adding new partners to an alliance portfolio or a multilateral alliance will lead to no access to additional knowledge, but at greater costs.

*Opportunistic behavior*

The downside of unintended knowledge transfer is closely related to opportunistic behavior. While knowledge can be transferred unintentionally due to personal interaction, opportunistic behavior of an alliance partner is a much bigger threat and may undermine the joint achievement of learning goals (Gulati, 1998; Kale et al., 2000; Larsson et al., 1998). In order to prevent opportunistic behavior, the companies involved have to invest in monitoring and penalization mechanisms (Mudambi & Tallman, 2010). Establishing a trust-based relationship over time, as a substitute for formal control mechanisms, can also mitigate the risk of opportunistic behavior (Nooteboom et al., 1997).

*Negative spillover*

Spillover effects can either be positive or negative. On the one hand, they can improve the legitimacy and reputation, as previously discussed. On the other hand, spillover effects can negatively impact customers' perception of the service and quality provided. Service failures are equally attributed to other partners as good service, meaning that the signaling of quality works either way (Bourdeau et al., 2007; Ozmel et al., 2013).

**Business operation**

*Underperformance*

One of the main objectives to join an alliance that was mentioned in the previous section is risk sharing. Essentially, this relates to the risk that the objectives of the alliance are not achieved (Fuller & Porter, 1986; Gopalakrishnan et al., 2008; Mariti & Smiley, 1983; Sakakibara, 1997). The risk of underperformance includes all possible hazards and obstacles on the way to achieving the strategic objectives. For example, a partner may not be as capable in the area as originally anticipated, or negatively influenced by the environment or industry landscape in the course of the cooperation (performance risk), or may not fully commit to the objectives of the alliance (relational risk) (T. K. Das & Teng, 1996).

*Coordination problems*

The more partners there are in a multilateral alliance, the harder the coordination becomes, which can ultimately lead to problems and a diminishing effectiveness of the alliance. Balancing internal competition with the overall goals of the alliance is a challenging task for the alliance management. As Gomes-Casseres (1994, p. 66) notes with respect to the aviation industry: “the line between just enough and too much competition is a fine one”.

*Higher than anticipated management costs*

Appropriate governance mechanisms are critical for the success of the alliance, in order to for example reduce coordination problems and opportunistic behavior. However, establishing and executing the complex mechanisms supporting the transfer of knowledge may be costlier than anticipated (Hoetker & Mellewigt, 2009). Due to the distinctive dynamics within a multilateral alliance and the more complex governance structure required, the issue of higher than anticipated management costs becomes even more likely (Lavie et al., 2007).

## 2.5 Strategic alliance design options

### Alliance type

In existing research, two categories are commonly used to differentiate the alliance types: equity alliances and non-equity alliances (or contractual alliances) (e.g. T. K. Das & Teng, 1996; Hennart, 1988; Pisano, 1991; Rugman, 1982; Teece, 1992; Yoshino & Rangan, 1995).

Equity-based alliances involve either minority equity agreements, where one or both partner acquire an equity stake in the other company, or equity joint ventures, for which a new, jointly owned, entity is created (Dussauge & Garrette, 1999). Equity stakes in this new entity can be either split symmetric (50:50) or with asymmetric equity stakes of the partners. Both the minority equity alliance, as well as the equity joint venture aim at a long-term collaboration of the firms (T. K. Das & Teng, 2001; Dussauge & Garrette, 1999).

Non-equity alliances can be formed based on a uni- or bilateral contract, without the involvement of equity or the creation of a separate entity. Partners in a unilateral contract based alliance work separately and, according to the contracts, are focused on the predefined tasks. Partners in a bilateral contract based alliance work jointly for a common goal (Dussauge & Garrette, 1999). Characteristics of the latter type commonly involve organizational adaptions, which make an unplanned alliance termination more complicated than in the unilateral form (T. K. Das & Teng, 2001; Dussauge & Garrette, 1999; Yoshino & Rangan, 1995). However, non-equity alliances in general are much more flexible than equity involving alliances, as the commitment is lower. Non-equity alliances in general can be established much faster and involve a significantly smaller financial commitment than equity alliances (Gulati, 1995). However, due to their contract-based nature, they lack control as well as commitment advantages that are present in the equity alliance. Furthermore, they can involve problems of interest alignment, behavioral control, and distribution of performance outcomes (T. K. Das & Teng, 1996).

**Partner selection**

Research has found many different factors influencing alliance success. The partner selection is broadly acknowledged as one of the most important factors (Shah & Swaminathan, 2008). A good partner fit can lead to higher efficiency, better cooperation, and ultimately to strategic advantages (Lambe & Spekman, 1997).

Parkhe (1991) characterizes a good partner fit as one that features high resource complementarity, as well as cultural and operational compatibility. Following research determined three main categories of partner selection: partner complementarity, partner commitment, and partner compatibility (Kale & Singh, 2009; Shah & Swaminathan, 2008).

First, partner complementarity describes, in accordance with the resource based view and social network theory, the degree of contrasting strategic resources that partners can provide an alliance (Dyer & Singh, 1998; Geringer, 1991). These resources can be either intangible (e.g. patents or know-how) or tangible (e.g. financial resources or production inputs). Resource gaps can be closed as companies may be willing to share their resources if, in return, they obtain access to resources not available on the market (Ahuja, 2000; Barney et al., 2001; Chung et al., 2000; Gopalakrishnan et al., 2008; Hennart, 1991; Hitt et al., 1999; Teng, 2007).

Second, partner commitment describes a partner's engagement to contribute non-trivial resources to a relationship and the willingness to also accept short-term losses for the sake of long-term advantages (Gundlach, Achrol, & Mentzer, 1995). One critical factor in this regard is the absence of contrary goals (Child & Faulkner, 1998). Partner commitment is particularly essential in cases in which the goals of the inter-organizational cooperation are congruous and in which uncertainty exists in regards to the exact work-flow and processes.

Finally, partner compatibility defines the compatibility of corporate cultures and working style of each corporation (Sarkar, Echambadi, Cavusgil, & Aulakh, 2001). However, in contrast to partner complementarity, this characteristic is very much partner-specific (Geringer, 1991). Important factors in this regard are the national culture, as well as the corporate culture (Altman & Baruch, 1998; Hofstede, 1984).

**Alliance governance**

Because of the specific challenges of an alliance, the partners need to define specific regulatory and administrative structures. These structures are defined as a bundle of formal and informal rules for the management, organization, and regulation of the alliance (Albers, 2010). Governance structures of alliances are significantly more complex to analyze in comparison to those of single organizations. This is because of their inherent duality, the existence of a “single organizational arrangement and a product of sovereign organizations” at the same time (Borys & Jemison, 1989, p. 235). In addition, the alliance governance lacks the final authority to change the partners’ cooperative behavior (Dussauge & Garrette, 1999).

This study employs the conceptualization by Albers (2010), as it provides a good integration of previous research in the field of alliance governance systems. According to Albers (2010), organizations that want to cooperate in the confines of an alliance, can be split in three parts for a deeper analysis. The first part is the strategic apex – the companies’ management – which is responsible for formulating the strategy, as well as the administration, guidance, and termination of an alliance. The second part is the firm organization – the middle management – which is either exclusively dedicated to the alliance or working both in the firm and the alliance and manages the day-to-day operations to implement the management’s vision. The third part is the operating core, which executes the value generating processes. The right form of alliance governance depends on the characteristics of these three parts and additional contingency factors, such as the member firm and alliance size, external environment, power relation, aim and scope, uncertainty and trust, member firm alliance experience, as well as member firm culture. The typical configurations of alliance governance systems differ in their structure and dynamic mechanisms. The structural dimensions reflect the degree of centralization, specialization, and formalization. The alliances' centralization is further split into vertical and horizontal centralization, in order to reflect the area of decision making. In addition, the structure can be specialized and have explicit alliance functions. Moreover, the degree of formalization reflects the extent to which pre-defined plans and processes exist.

**Alliance portfolios and multilateral alliances**

The previous sections focused on dyadic alliances, as does most of the existing literature on strategic alliances. However, in praxis, companies are often part of multiple alliances, either in the form of an alliance portfolio or as participants in a multilateral alliance. As previously mentioned, alliance portfolios are defined as a "set of discrete bilateral alliances entered into by a firm" (Doz & Hamel, 1998, p. 222). A focal firm maintains a portfolio of different alliances with different goals and can enter/ terminate each of these alliances separately. The term "multilateral alliance" describes formalized arrangements between more than two partners for a common goal and with a potentially broader scope (Doz & Hamel, 1998; Lazzarini, 2008).

Generally speaking, multiple alliances have similar benefits and management challenges as a bilateral alliance, but some distinct differences exist. The greater number of partners offers access to more diverse information and network level learning activities as the firm's knowledge is made widely available for other firms (Baum et al., 2000; Dyer & Nobeoka, 2000). This enables more unique combinations of the knowledge and enhances innovation. Furthermore, multiple alliances offer new collaboration opportunities in terms of contact to other companies within the network. As such, a firm within a multiple alliance profits from the relational capital, which may lead to new projects or innovations (Khanna et al., 1998). Alliances, established with the objective to realize synergies and increase efficiencies, also profit from multiple partners, as the number of companies sharing the costs of shared services increases and a higher market power can be exercised to achieve larger economies of scale and scope (Soh, 2010).

However, firms have to balance their alliance activity as diminishing returns from excessive alliance activity exist. Up until a certain threshold regarding the number of partners, multiple alliances may well benefit the company, but exceeding that number may lead to increased complexity and dysfunctional behavior (Ding, Eliashberg, & Stremersch, 2013; Gulati, 1995). Management issues of multiple alliances can be distinguished in an external (portfolio coordination) and internal (organizational learning and synergies) perspective

(Doz & Hamel, 1998). The portfolio coordination is characterized by an increased complexity due to a greater variety of diverse partners. This means that issues already stated for dyadic alliances become even more critical. Multiple partners make it harder to monitor and control for opportunism and free riding, as well as to find common ground considering the different individual views (Nooteboom et al., 1997). Furthermore, a higher coordination effort is necessary to deal with the increased complexity of alliance governance and ambiguity of relations (Doz & Hamel, 1998). Balancing cooperation and competition can be a highly challenging task for an alliance as a whole. Though more diverse knowledge is potentially available in multi-partner alliances, the realization of organizational learning and synergies yields many challenges. The partner selection also becomes more problematic, as complementarity needs to be ensured, but the commitment and compatibility still need to be high. As the alliance evolves, companies may become more and more alike, as they exchange knowledge and deepen their cooperation. This may cause the “diversity of knowledge” to diminish over time, which poses an existential threat to the alliance (Dyer & Nobeoka, 2000, p. 365).

# 3 Evolution, business models and cooperation in the aviation industry

## 3.1 Aviation industry evolution

Aviation has come a long way from the Wright brothers’ first flight of a heavier-than-air, powered aircraft in 1903 and the first commercial flight in 1914, which covered 34km in a mere 23 minutes (IATA, 2014). Today, the worlds’ longest, non-stop route connects Dubai (United Arab Emirates) and Auckland (New Zealand), and covers about 14,200km in 17 hours and 15 minutes (BBC, 2016). The success story of the industry started in 1929, when the Warsaw Convention was signed by 152 parties. It was the first international agreement on rules regarding international air carriage, and mandated the issuing of passenger tickets and baggage checks, as well as setting rules for legal jurisdiction and the airline’s liability for passengers and cargo (IATA, 2014; ICAO, 1929). The first major players emerged within ten years after the convention was signed. In combination with new innovations and technical progress, such as the milestone release of the Douglas DC-3 in 1936, passenger air travel became profitable and thus started “the modern era of passenger air services“ (IATA, 2014).

The industry was, for the longest time, highly regulated. The U.S. Civil Aeronautics Act in 1938 established the Civil Aeronautics Board, which was responsible for setting up the route network and ticket prices. This act favored established players and posed a challenge for new market entrants. Since fares were regulated by the government, airlines had to differentiate themselves from their competitors by offering high quality services. American Airlines was the first airline ever to open an airport lounge at LaGuardia Airport, New York in 1939. This service offering later became a central part of alliance bonus systems, evaluated in more detail later in this chapter. While the industry grew, the governments of 52 countries agreed to implement common "rules and regulations for aircraft, airspace and safety" (IATA, 2014) during the Chicago Convention in 1944, which is still the legal foundation for today's commercial aviation and the origin of the International Civil Aviation Organization (IATA, 2014; ICAO, 2006).

The Boeing 747, the world's first wide-body aircraft, entered service in 1970 on Pan American Airlines' route from New York to London. It was the next leap towards air travel for a broader audience. Passenger capacity increased significantly, which allowed the reduction of ticket prices, making air travel more affordable for travelers around the world. The reduction of ticket prices was stimulated once more in 1971, when Southwest Airlines became the world's first low cost carrier and therefore changed the industry landscape forever (IATA, 2014).

After that, in 1972, the first neutral paper ticket was issued, meaning that any travel agent around the world was able to book flights on almost any airline in the world, which further supported the expansion of the business. Furthermore, following the growth of information technology, the Billing and Settlement Plan was established at the same time. The Billing and Settlement Plan is the foundation for inter-airline travelling, as it ensures that airlines receive their share of the ticket price promptly and as accurately as possible. By 2012, 88 Billing and Settlement Plans served 350 airlines in 177 countries and territories, processing $249 billion (IATA, 2014). This unique, never seen before, combination enabled the cooperation of different airlines from around the globe and is at the very root of the creation of airline alliances. A few years later, in the mid-1970s, British Airlines started to offer exceptionally inexpensive transatlantic flights, which caused American airlines to have a strong disadvantage as they were still heavily regulated. After being urged by the American carriers, the U.S. Congress passed the Airline Deregulation Act in 1978 – kick starting an era of free market competition, phasing out the government's control of fares and routes. This made the entrance of new airlines viable again, exposing U.S. carriers to market forces and ultimately fostered the global liberalization of the industry (IATA, 2014). After the deregulation of the industry and the entrance of new carriers in the market, fare prices decreased and passenger numbers increased significantly. The new pace of the industry forced major American players, such as Pan American Airlines and TWA, who dominated the previous centuries, to cease their operations in the early 1990s, following the economic downturn after the Gulf War.

Despite the economic downturn, customer loyalty and service offerings remained very important factors in the industry. Robert Cradell, President and Chairman of American Airlines, established the first ever successful frequent flyer program AAdvantage in 1981, which now has 72 million members and still remains among the largest frequent flyer programs worldwide (Ernst & Young, 2014; IATA, 2014). Airlines also continued to explore collaboration opportunities leading to the formation of the Wings Alliance of KLM and Northwest Airlines in 1989. Though it remained a bilateral alliance throughout its existence, it proved the advantages of consolidation for both the airlines and the consumers. The granting of Anti-Trust Immunity by the Department of Transportation in 1993 paved the way not only for this collaboration, but for all alliances to come (IATA, 2014; Schlangen, 2000).

The 1990s was a very influential decade for the aviation industry: The era of open skies began in 1992, when the first open skies agreement was signed between the United States and the Netherlands. Open skies agreements aim at liberalizing the rules and regulations of the international airline industry, by i.e. "giving each country unrestricted landing rights in each other's territory" (IATA, 2014) in order to create a free market environment. The industry was heavily influenced in the following years by the development of more and more agreements, eventually leading to the multilateral EU-US Air Transport Agreement signed in 2007 (European Commission, 2015). Other open skies agreements include the U.S. and China, India, as well as the United Arab Emirates and the EU and Australia and New Zealand.

In 1997, the first multilateral airline alliance, the Star Alliance, was founded by five airlines from three continents and expanded in the years to follow. Two other (multilateral) global airline alliances were founded shortly thereafter in 1999: Oneworld and SkyTeam, bringing a great variety of benefits to customers and creating economies of scale as well as strategic advantages for the airlines (IATA, 2014; oneworld, 2015; SkyTeam, 2014a; Star Alliance, 2016a). Today, the three major alliances have a total market share of 63.8% and consist of 27 members (Star Alliance), 19 members (SkyTeam) and 15 members (oneworld) (see Appendix A: Global airline alliance overview).

### 3.2 Carrier differentiation

Empirical magazines and theoretical studies differentiate between three different carrier groups in passenger aviation: network carriers, gulf carriers, and low-cost carriers (e.g. Delfmann, Baum, Auerbach, & Albers, 2005; Dresner et al., 2015; Graf, 2005; O'Connell, 2011; Vespermann et al., 2008). Due to their comparable business model and operation, the focus of this thesis is on network and gulf-carriers, as low-cost carriers are unlikely to enter any of the global airline alliances due to their different business model and service offerings.

In order to distinguish the carrier groups, it is important to understand the way aviation networks are set up. In a hub and spoke system, which is widely employed by network carriers, traffic that comes from one city (spoke) is distributed through a central hub, to the final destination (spoke), except if one passenger's departure city or destination is the hub itself. This enables carriers, to offer flights from each spoke within its network to another spoke, with one layover at the hub. The other system that is commonly used, is the point to point system, which provides direct traffic from one city to another. The reason, why the hub and spoke system is so popular, is that it provides a large number of possible connections, even with a relatively low number of airports.

Network carriers[4] operate their flights based on a hub and spoke system and have a dense route network with one or more hubs. Coordinated feeder[5] and connecting flights to/ from these hubs offer as many connections as possible. The operating reach of network carriers is global. Therefore, network carriers fly to domestic, inter- and intra-continental destina-

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[4] A variety of names are used in the literature to describe this type of airline. Other names used most commonly include: "international passage airlines", "major airlines", "full-services carrier", "full service network carrier".

[5] Feeder flights bring-in travelers from destinations not served by the airline itself to hubs, where they can continue their journey.

tions. However, no airline has yet built a network that spans the whole globe, which highlights the importance of strategic alliances among network carriers in order to expand their scope. Contrary to low-cost carriers that have very homogenous fleets (with only one or two types), the aircraft fleet of a network carrier is very heterogeneous, with turboprops and small aircrafts for domestic connections as well as wide body aircrafts and jumbo jets for international connections. Also, there is a large variety of available upgrades and service offerings provided by these airlines. The classes available to the customer vary from Economy, Premium Economy, Business, and First Class, each offering more space and/ or more sophisticated information and entertainment solutions, as well as extra luggage and lounge access, etc. (Groß, 2011; Maurer, 2007; Reichmuth et al., 2008).

Gulf carriers form a subgroup of network carriers, as they also base their services on a hub and spoke system. The term “gulf carrier” refers to airlines based in the gulf region and is most commonly associated with the three major carriers based in the gulf region: Emirates (Dubai, United Arab Emirates), Etihad Airways (Abu Dhabi, United Arab Emirates), and Qatar Airways (Doha, Qatar) (Dresner et al., 2015; Squalli, 2014). For an overview of gulf carrier key facts, see Appendix E: Gulf carrier overview. One of the main reasons for the gulf carriers’ development is the states’, airlines’, and airports’ vision to develop air transport as a major income stream alternative to oil and gas exports. The gulf carriers have been growing at a remarkable pace in recent years. Individually, they already match or exceed the size of major, established players in the European and American aviation market.

Besides their economic success, the gulf carriers have been in the spotlight of criticism, mainly from established network carriers, for receiving high subsidies from their respective governments and therefore having an unfair competitive advantage. Additional areas of criticisms include the absence of taxes (Air passenger taxes, income taxes for both the company and employees, VAT on domestic flights), environmental protection (carbon offsetting, noise control, ban on night flights), labor unions, as well as low airport and service fees (Lufthansa, 2014; Partnership for Open & Fair Skies, 2016). Besides these characteristics, gulf carriers have a very distinct competitive advantage that separates them from other carriers: their location in the gulf area, which is an essential part of their transfer hub strategy for long haul services, allows them to reach most of the worlds’ major cities within eight hours of flight time. The gulf carriers’ success essentially depends on the connecting traffic from long haul flights, as the local market in the Middle East is limited due to a small population (Clayton & Hilz, 2015).

Airlines in general, but specifically gulf carriers, expand their networks by utilizing the freedom rights, enacted during the Chicago Convention. The information on the freedom rights provided in this study are based on the International Civil Aviation Organization (ICAO, 2004). The fifth freedom right was originally initiated to make long haul flights viable. Airlines are allowed to include one or more layovers along the way to their final destination to pick up more passengers. The sixth freedom right is based on the hub and spoke system, which enables airlines operating with this model to offer routes between two spokes (cities) in different countries, while connecting through the airline's hub. The sixth freedom right provides the opportunity to not rely on the two governments to form bilateral agreements (as it would be necessary for a direct flight between the two city pairs), but rather on bilateral agreements between the hub and the spoke, only.

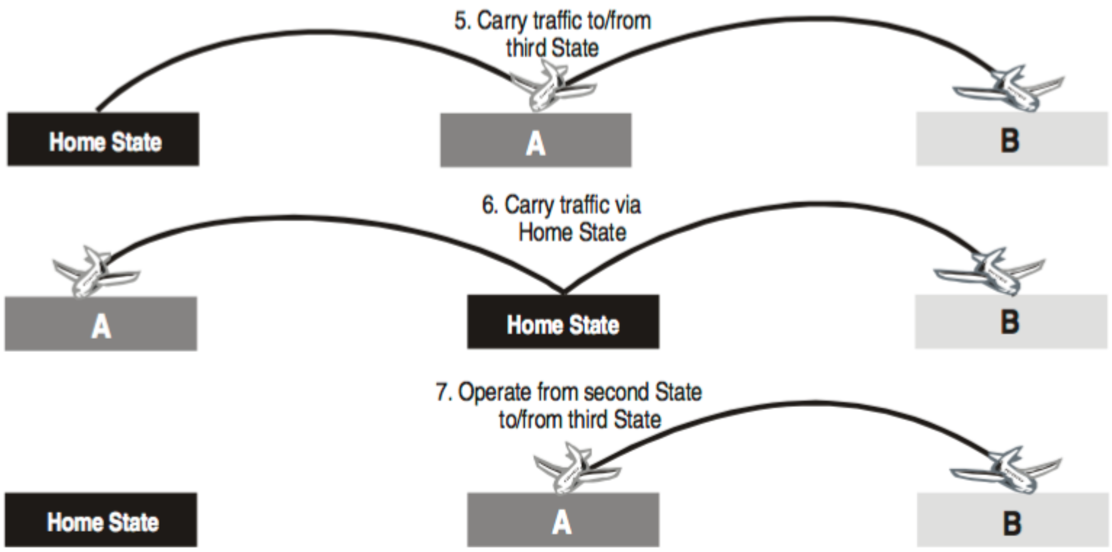


**Figure 1: Excerpt from "The Nine Freedoms of the Air" (ICAO, 2004, pp. 4.1-9)**

Finally, the seventh freedom right allows airlines to establish domestic routes that do not need to connect or extend international flights from the airline's home country. Emirates would, for example, therefore be able to offer flights from Dubai to Melbourne via Perth, but could offer the flight from Perth to Melbourne individually. All of the freedom rights are, however, subject to negotiations with the countries involved, which can take a significant amount of time before being successful (Doganis, 2009; ICAO, 2004). Figure 1 illustrates the fifth to seventh freedom rights for clarification purposes.

## 3.3 Airline industry cooperative structure

The overview of the industry evolution earlier in this study showed that the market deregulation and liberalization did not only enable the quick international expansion of airline networks, but also was the beginning of the era of airline alliances. After years of forming and terminating new alliances, the current market structure with three global airline alliances competing against a number of network carriers, various low-cost carriers, and two of the gulf carriers has been relatively stable. The annual “Alliances Survey” by Airline Business[6] magazine points out that the cooperation objectives of global airline alliances include joint ventures in route network development and flight operation, joint catering, ground handling and aircraft maintenance, shared sales, marketing, purchasing and insurance operations, codesharing, and frequent flyer programs. One of the main objectives of the global airline alliances is the development of a superior route network, which is achieved through the exploitation of structural holes. In practice, this means that the members of the alliance aim to increase the frequency of flights, establish new routes through connecting flights with alliance partners, and reduce the overall travel time with better connections (Gudmundsson & Lechner, 2006). This indicates that airlines need to keep screening for new business opportunities and partners in order to stay ahead of the competition. Furthermore, Gudmundsson and Lechner (2006) suggest that a strategic repositioning is advisable for companies that find themselves in a situation with a low uniqueness of resources (e.g. two airlines with a similar route network in one alliance). That said, it is obvious that the competition takes place on two levels:

First, externally, the multilateral alliances themselves compete against each other and against unallied airlines. The competition among networks is based on the main objective of the alliances, providing the best worldwide network and benefitting from the network effects, as well as from joint airport facilities and a common branding. In addition, being a member of any of the global airline alliances does not prohibit airlines from forming partnerships outside of the alliance. For example, oneworld member Qantas operates a joint venture with Emirates on flights between Australia and Europe via Dubai. Moreover, unallied airlines also impose pressure on the networks.

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[6] The Airline Business magazine is published monthly and well known for its interviews with industry leaders and in-depth analysis. Beside the top 100 airlines and airports surveys, traditionally the September issue features the annual alliance survey referenced in this chapter.

Second, internally, the companies within an alliance compete against each other. The competition within networks is commonly referred to as coopetition (Mohr & Spekman, 1994), as both cooperation and competition motives exist side-by-side. Companies may remain competitors although they cooperate on many aspects of the customers' travel experience.

Alliances should constantly search for structural holes and for partners that can fill them, followed by the termination of relationships with partners that become unprofitable. Therefore, participating in an alliance network can be described as a constant fight for a mutually beneficial competitive position and resources (both internal and external). Gudmundsson and Lechner (2006) argue that due to this competitive behavior, alliances cannot be stable with partner exits and new entrants being necessary in order to stay competitive.

Interestingly, the model of alliance web evolution by Doz and Hamel (1998, p. 246), anticipated the current development in the aviation industry, even though the original predictions were based on observations from the automotive and microelectronics industry. The model suggests that alliances evolve from independent competitors to multilateral alliances, when the need for joined work is determined. From there, the multilateral alliances evolve to competitive coalitions, when the coopetition within the alliance becomes more stable and the alliances consolidate. Etihad has built its alliance and equity ownerships regardless of the alliance membership status and its partners deepen their cooperation across alliance borders. For example, Air Berlin is working together with Air France (SkyTeam), British Airways (oneworld), Etihad (through Etihad's equity partners) and Qatar Airways (oneworld) all at once.

### 3.4 Global airline alliances

The Star Alliance's 28 members have an overall market share of 24% and fly to 1,213 destinations worldwide, serving 192 countries (see Appendix B: Star Alliance member airlines). As pointed out earlier in this study, the Star Alliance, founded by Air Canada, Lufthansa, SAS, Thai Airways, and United Airlines in 1997, was the first major airline alliance. The goal was to "take passengers to every major city on earth" by providing a vast and efficient network (Tagliabue, 1997).

SkyTeam's 20 member airlines have an overall market share of 20.8% and fly to 1,037 destinations worldwide, serving 177 countries (see Appendix C: SkyTeam member airlines). Its portfolio was significantly diversified recently by the addition of carriers such as China Airlines, Garuda Indonesia, Kenya Airways, and Saudi Airlines.

Oneworld's 15 member airlines have an overall market share of 19.0% and fly to 954 destinations worldwide, serving 154 countries – significantly fewer than the two competitors (see Appendix D: oneworld member airlines). These destinations are, however, targeted towards, and highly relevant for, business travelers. Oneworld's approach to alliance governance is more open compared to its competitors, with the spirit of the alliance being "a little bit less dependent between each other than other alliances" (Iatrou & Oretti, 2016; Pilling, 2005). However, oneworld still has a separate entity for governing the alliance: The oneworld Management Company, set up in Vancouver (Canada) in 2000, is now located in New York. Function heads from the commercial, membership, customer experience, finance, IT, and corporate communications departments report to CEO Bruce Ashby, while he himself reports to the governing board, consisting of the CEOs of oneworld's member airlines. The alliances' activities are furthermore managed by 25 full-time employees of the oneworld management company. Overall, this setup constitutes a high horizontal centralization. Vertically, each of the airlines operates alone, but when necessary work together with the oneworld management company in working groups "drawn from executives across all member airlines". Standardization is also an important factor for oneworld. According to a press release from Dell (2012), oneworld has implemented a new information technology infrastructure with a hub based on Dell's "Boomi AtomSphere" cloud integration. This new system aims at standardizing the IT environment of all member airlines and will, according to Dell (2012), "substantially reduce the complexity, cost and time involved" in the operations.

Despite being less integrated as an alliance, many of oneworld's members decided to form joint ventures. Such an example is American Airlines, British Airways, and Iberia, which launched joined services across the Atlantic in 2010 (before the merger of British Airways and Iberia), with Finnair eventually joining them three years later (oneworld, 2016).

# 4 Case study of the gulf carrier's multi-partner alliance strategy

The previous sections not only provided an explanation of the motivations and downsides of joining alliances, but also provided a broad foundation for the further analysis of alliances, such as types of alliances, important factors for partner selection, and governance options. The following paragraphs summarize and synthesize the findings regarding the motivations and downsides from the structured literature analysis.

## 4.1 Methodology

In line with the suggestion of Eisenhardt (1989), the multiple case study approach will be used in order to evaluate the gulf carriers' reasons behind their alliance affiliation. As she notes, this type of research is especially useful when developing theoretical constructs, which in this study reflect the propositions that are to be developed in the discussion. Several sources are potentially available to obtain information for the cases. According to Yin (2009, p. 101), these are "documentation, archival records, interviews, direct observation, participant-observation, and physical artifacts". Combining different materials is the unique strength of the case study. Because of the research objective's qualitative nature to understand the management's decision not to join a global airline alliance, this study employs only qualitative data for the cases (Eisenhardt, 1989; Yin, 1981). As gulf carriers and airline alliances in general are a much discussed topic in the industry, even though no access to primary data such as personal interviews could be obtained, very valuable information from top management of the airlines is publicly available.

For the analysis, the information from the literature review is bundled in a conceptual framework, which is then used as the foundation and guiding structure of the case analysis and further discussion. Theoretical insights from the literature review on individual carriers are used to hypothesize on the reasons behind carrier-specific decisions. In this, information is drawn from multiple sources of evidence in order to maximize the benefit of the case study (Yin, 2009). Company histories and other critical information such as the cost structure and involvement of the states are reflected against the extant theory on allying. Empirical data such as interview transcripts, reports from leading industry magazines, newspaper articles, as well as press releases and annual reports are included to gain reassurance to the interpretations through comparison and in order to develop deeper case-specific understanding of management decisions. The carrier-specific narratives are developed from theoretical insights, in the first line, as reflected against company information and empirical data to back up the findings. An overview of all empirical data that has been collected for the case study is shown in Appendix F: Case study material overview. The data collection took place during March to September 2016. The narratives are finally summarized in the tables 4 and 5.

## 4.2 Derivation of the analysis framework

In order to take a conceptual approach to answering the question of why the gulf carriers choose not to join any of the global airline alliances, it is necessary to evaluate the motivations and downsides in the carrier's specific context. As aforementioned, the decision process can be split into two separate steps: First, the general decision to form an alliance needs to be made based on the thorough evaluation of benefits and downsides that come with the alliance (Gulati, 1998). Therefore, this decision point marks the first step in the analysis framework. On the one hand, if the downsides outweigh the motivations, the decision should be to stay autonomous. On the other hand, if the motivations outweigh the downsides, the decision should be to form or join an alliance. However, this simplified evaluation dismisses one important factor: the management and its decision making. Therefore, this rational view needs to be expanded to include management specific views regarding the company's strategy, as the management team ultimately determines if the alliance is formed or not. Second, in case the decision is made to form or join an alliance (if the motivations to form an alliance outweigh the downsides), the management needs to consider the different alliance design options presented earlier in the literature review. The fundamental decision to form a unilateral alliance or to form/ join a multilateral alliance again brings its own specific advantages and disadvantages that need to be considered. This is also true for the institutionalization as a contract or equity based alliance and the selection of partners with low, medium, or high complementarity, compatibility, and commitment. In addition, the setup of the alliance governance with low, medium, or high formalization, specialization, and centralization also impacts the cooperation.

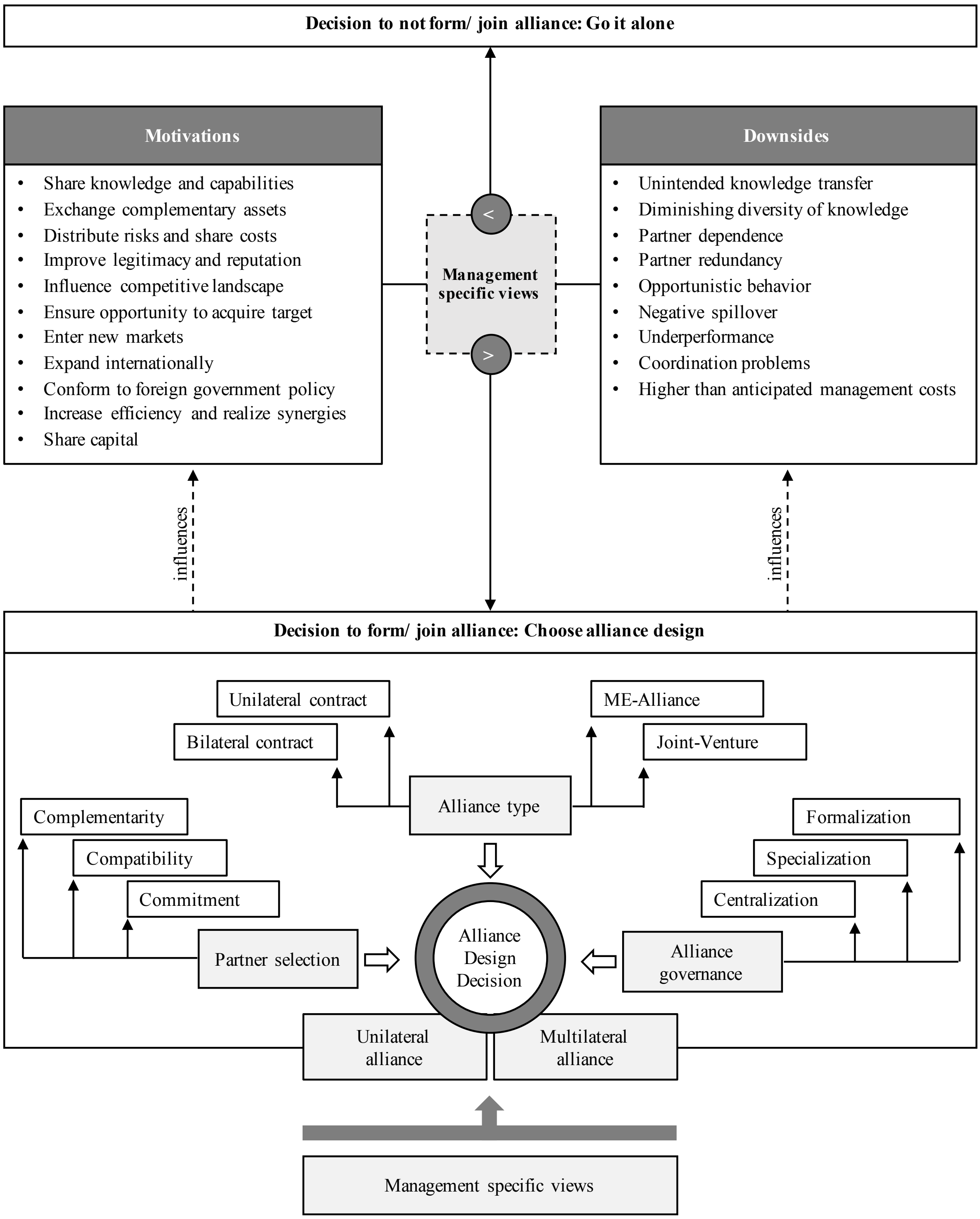


**Figure 2: Conceptual framework of the alliance and governance decisions**

The framework in figure 2 summarizes these thoughts, starting with the evaluation of motivations and downsides under consideration of management specific views and then following the decision process further. With this framework as a theoretical basis, the analysis of the individual carrier is conducted in the following sub-chapters.

## 4.3 Individual carrier analysis

In the following paragraphs, the case study of each of the carriers will be narrated and the respective case will be analyzed based on the background information previously presented and the framework shown in figure 2.

**Emirates**

Ever since its foundation in 1985, Emirates has profited from its close ties to Dubai's royal family. Its chairman, Ahmed bin Saeed Al Maktoum is the uncle of the Emir of Dubai, Mohammed bin Rashid Al Maktoum. The company is wholly owned by the Government of Dubai, which provided with the initial start-up investment. After launching the first flights from Dubai to Karachi, the company expanded quickly adding Colombo, Dhaka, Amman, and Cairo as new destinations to its route network. Following further investments, the company continued to grow, acquiring new aircrafts and adding new destinations in Europe and the Far East. In 1995, after ten years of operation, Emirates was already servicing 30 different countries. The following years were the starting point of a new era for Emirates when new aircrafts, such as the Boeing 777 and the Airbus A340 and 380, came into service. They made it possible for Emirates to provide non-stop services to America and Australia, while subsequently growing Dubai as its main hub, bypassing the traditional hubs in Amsterdam, Frankfurt, London, and Paris (Emirates, 2016b, 2016c).

The Emirates business model is based partly on the geographical location of its hub in Dubai and in flight operation cost advantages due to a modern fleet with wide-body jets, and close to cost-optimal flight distances, as well as a lean workforce and flat organizational structure (CAPA, 2014). Furthermore, Emirates connects primary and secondary airports via its Dubai hub and therefore offers much shorter travel times due to a lower number of transfers required (Emirates, 2015a; Grimme, 2012). Throughout its operation, Emirates has been extremely selective when it comes to inter-organizational cooperation. In 2007, while the global airline alliances thrived, Emirates abandoned its links with Cyprus Airways, US Airways, Delta Airways, and British Airways originally formed in the early 1990s. It currently operates 16 codeshares and is part of a joint venture with Qantas on flights between Australia and Europe via Dubai (Dunn, 2015).

In the aviation specific context, the *exchange of complementary assets* pertains to expanding the network of an airline through cooperation with another airline, thereby accessing its network. The combined number of destinations and routes achieved by this cooperation offers the chance to attract new customers. However, Emirates follows an organic growth strategy (Emirates, 2015b). Instead of using an alliance to expand internationally, Emirates' *international expansion* strategy is based on two pillars: First, they aggressively lobby for fifth freedom rights on long-haul routes in order to establish new services. This is a time consuming process, but if successful Emirates can operate the route without being dependent on an alliance. Second, Emirates also exploits other freedom rights, and the rights it gained in the early phases of their aviation history. When their planes were not able to go from Dubai to Australia (e.g. Auckland, Brisbane, Melbourne, or Sydney) without a layover, they secured Singapore, Kuala Lumpur, and Bangkok as layover destinations and simply maintained these routes in addition to the direct routes that became possible through advances in aircraft technology. This opened up international expansion opportunities between Dubai, Australia and New Zealand, as well as for example in Southeast Asia.

Airlines in general face protectionist barriers when they try to enter new countries. As described earlier in this study, open skies agreements are used to regulate air traffic between two countries (IATA, 2014). If no access to a country can be achieved through fifth, sixth or seventh freedom rights, cooperation can be the vehicle of choice in order to *conform to foreign government policy*. For Emirates, this can be observed in its partnership with Qantas, which provides access to the Australian market as well as to Qantas' flights to Europe (Rapoza, 2014).

Although the aviation industry is of rather capital than knowledge intensive nature, *sharing knowledge and capabilities* through alliances can positively influence the airline's operational efficiency. However, as aforementioned, Emirates has a very low cost structure due to several reasons: First, it has lower fuel costs than most of the network carriers, based on the young age of its fleet of aircrafts, which averages at 74 months, compared to a 140 months' industry average (Emirates, 2016a). The region's proximity to oil production, however, does not give Emirates a significant cost advantage (Emirates, 2012; Lohade, 2015). Second, labor costs are lower in the Emirates than in Europe or the United States of America, because of the lack of trade unions and the under developed markets. In addition, salaries are not taxed in the Emirates and its geographical location gives it access to the cheap labor markets of neighboring countries, such as Bangladesh, India and Pakistan (Al-

Kibsi, Benkert, & Schubert, 2007; Emirates, 2012). Finally, Emirates has a significant competitive advantage based on the low airport charges in its hub in Dubai (Parker & Kerr, 2013). Therefore, Emirates has less need to *share its knowledge and capabilities, distribute risks and share costs*, or to *increase efficiency* and *realize synergies* - benefits normally thought to be inherent within an alliance - compared to other established players that lack this foundation. Although it could create synergies from sharing lounges and airport facilities with other airlines, it would also risk the *underperformance* of a partner, a dilution of its brand and loss of control over every aspect of the customer experience that it currently maintains, namely risk a *negative spillover*. In addition, Emirates is heavily state funded and has almost unlimited resources as well as the support of the ruling family. Therefore, the *sharing of capital* is much less of an applicable motive to Emirates than it is to other established players.

As a world-renowned airline with a solid track record, there is no reason for Emirates to join any airline alliance to *improve its legitimacy and reputation*. Rather, as shortly mentioned above, joining an alliance would inherent the risk that another airline does not provide the outstanding service Emirates' customers expect, causing a *negative spillover* effect and pose as more of a threat to Emirates' reputation.

Even without joining one of the global airline alliances, the gulf carriers have had a significant influence on the aviation industries' competitive landscape in recent years. Emirates is able to exert pressure on other airlines through its low ticket fares and high quality of service. Just by regular operation, Emirates has had a noticeable impact on the competitive landscape, which makes cooperating for the sake of *influencing the competitive landscape* a less applicable motive.

The motive to *ensure the opportunity to acquire target* is also not applicable in the case of Emirates. First, acquisitions are contrary to its strategy of organic growth. Second, the acquisition of airlines is at least partially regulated by the local governments, which makes it for example impossible to acquire a European airline, because it is not possible to own more than a 49% stake in European airlines.

Emirates' focus is very much on its passenger business and has lately expanded to cargo as well. However, cargo remains much smaller, which makes the motive to *enter new markets*, especially outside the aviation industry, not applicable.

Emirates voices the concern that joining a global airline alliance would be a threat to its flexibility. Emirates' chairman Al Maktoum clearly states that "if [Emirates] went with the alliances I don't think you would see Emirates at the size it is today" (Cronin & El Gazzar, 2015). Emirates is cautious to become too *dependent on a partner*, i.e. rely on a partner's approval to offer new routes and destinations (Heasley, 2010). In addition, another problem Emirates sees in alliances is the *redundancy of partners*. Airlines in conventional alliances would also operate on many of Emirates' routes, causing higher partner redundancy and therefore making it unattractive for Emirates to join one of their partnerships.

Based on the available information, no references regarding the risks of *opportunistic behavior*, *unintended knowledge transfer*, *diminishing diversity of knowledge*, *coordination problems* and *higher than anticipated management costs* were found.

**Etihad Airways**

In 2003, Etihad Airways was established by Royal Decree issued by Sheikh Khalifa bin Zayed Al Nahyan and is, as a flag carrier, still state owned. In 2004 and 2005, the first international flights were introduced to Geneva, Brussels, and Toronto. Just three years after being established, Etihad was already flying to 30 destinations with further expansions in the pipeline. It was also the first of the middle-eastern carriers to win the "World's Leading Airline" award in 2009, continuing to win it for five consecutive years (Etihad Airways, 2016c). Due to the bundled power within the royal family, Etihad Airways benefits from very flat hierarchies and quick decision processes. Its modern fleet and geographical location give it similar advantages as Emirates. It is the smallest of the three gulf carriers (by available seat kilometers) and flies to 117 destinations in 68 countries, which is significantly less than Emirates (151 destinations, 80 countries) and Qatar Airways (150 destinations, 75 countries) (see Appendix E: Gulf carrier overview), but also communicates no interest in joining any of the global airline alliances. However, contrary to Emirates' organic growth strategy, Etihad Airways follows its own equity alliance strategy and over the last years has built wide-ranging partnerships and acquired stakes in Air Serbia, (49%), Air Seychelles (40%), Air Berlin (29%), Jet Airways (24%), Virgin Australia (24%) and Alitalia (49%). It also acquired a 33.3% stake in the Swiss-based carrier, Darwin Airline, in 2013, which was then rebranded to Etihad Regional (33%). A small, regional, carrier gives Etihad and its equity partners the chance to access tertiary cities and use these passengers to feed its long haul routes and therefore put even more pressure on carriers such as the Lufthansa Group that currently serve these cities (CAPA, 2013).

In 2014, Etihad Airways founded its own airline alliance, Etihad Airways Partners. It consists of a total of eight airlines, Etihad, Etihad's Equity Partners, and NIKI Luftfahrt (which in 2011 merged with Air Berlin), and flies to over 350 destinations worldwide (Etihad Airways, 2016b, 2016d). Furthermore, Etihad Airways cooperates with carriers from the global airline alliances, including Air France, KLM and Air Canada, and operates a total of 46 codeshares (Dunn, 2015). This alliance enables Etihad Airways and its partners to *exchange complementary assets* and access feeder traffic and more network connections in major European and global markets with Air Berlin (Germany), Alitalia (Italy), Virgin Australia (Australia), and Jet Airways (India) (Baker, 2015). In order to differentiate its alliance from the global airline alliances, Etihad Airways' CEO named its partnership a "large aviation group" (Schaal, 2015).

Similar to the big three airline alliances, Etihad Airways' equity partners share sales resources and loyalty programs. Primarily to *share knowledge and capabilities*, but also to avoid *negative spillovers*, *increase efficiency and realize synergies*, as well as to achieve economies of scale. Etihad Airways uses joint training facilities in Abu Dhabi in order to ensure common standards and share knowledge. For example, it conducts the wide body, retrofit work, and the 787 pilot training and cabin crew training in its facilities. Furthermore, Air Serbia's back office is also integrated in its headquarters in the United Arab Emirates (Schaal, 2015). By sharing the knowledge and capabilities through the cooperation and also keeping control and supervision over its unequal partners, as well as conducting joint trainings, Etihad also significantly reduces the risk of *negative spillover*. According to Hogan, one big disadvantage is the huge duplicate overhead allied airlines face. So what they are doing is "looking for centers of excellence" in order to determine the best location for one specific task among all the partners and conduct the activity in a shared facility at this location (Schaal, 2015). This shows that although Etihad Airways has a very low cost structure due to similar reasons as Emirates, *distributing risks and sharing costs*, as well as *increasing efficiencies and creating synergies* is on the management's agenda and an important factor for forming the alliance. Judging from the information that is publicly available and screened for this study, there does not seem to be a big concern of *unintended knowledge transfer* or the potential for *diminishing diversity of knowledge*. This may be due to the fact, that the airline business is capital intensive, rather than knowledge intensive, and as Hogan communicates, it is about sharing the otherwise duplicate overhead than creating completely new products (as may be the case in chemical or IT businesses).

Similar to Emirates, as an already world-renowned airline with a very good reputation, there is no reason for Etihad Airways to join an airline alliance to *improve its legitimacy and reputation*. Furthermore, Etihad Airways, like Emirates, has significantly influenced the worldwide aviation industry. The gulf carriers disrupted the industry with their low-ticket fares and high quality of service. Joining a global airline alliance, therefore, is not necessary to *influence the competitive landscape*. However, Etihad's equity partners are definitely meant to impact the competitive environment, as it enables Etihad to access markets it would not have access to otherwise.

Even though Etihad Airways has significant equity stakes in other airlines, which it will likely expand, the motive to *ensure the opportunity to acquire target* is not applicable either due to the regulations on a national level that were already discussed in the case of Emirates. Etihad Airways' cooperation focuses on the passenger segment and its equity alliances clearly focuses solely on the passenger sector (even though Etihad Airways itself and some of the participating airlines are also operating in the cargo sector). Therefore, *entering new markets* is not an applicable motive for Etihad Airways to join an alliance.

*International expansion* is one of the main chances for Etihad to grow and bring in more tourists to its Abu Dhabi hub. However, expanding internationally without partners can be very time consuming, as shown in the case of Emirates. Therefore, if Etihad wants to speed up the process to catch up to Emirates, cooperating in order to *conform to foreign government policy* is essential. For countries in which this expansion can only be achieved with equity acquisitions of local companies, cooperation is essential. Etihad's commitment to this expansion can be seen in it being the first international airline to buy a stake in an Indian airline (20% in Jet Airways), after the Indian government imposed a policy, allowing foreign ownership of airlines (Rapoza, 2014).

Based on its state owned status, heavy state funding and the involvement of the royal family, the *sharing of capital* is not a relevant motive for Etihad Airways to join an alliance.

The risk of becoming too *dependent on a partner* is an important factor for Hogan, who reasons that Etihad Airways has not joined a global airline alliance because “when you join an alliance you’re stuck, that's why we are happy to be non-aligned” (Mouwad, 2015). Etihad has found a different way to deal with the partnerships’ inherent problems: All of its investments in airlines have in common that they struggle financially. As Hogan says in an interview with Schaal (2015) “if we hadn’t invested in Air Berlin or Alitalia they would have gone out of business”. By investing money in these airlines and gaining control over them, Etihad creates a *partner dependency* of the other party, without losing control itself, which helps Etihad to access and expand markets. Furthermore, with this structure, Etihad is able to reduce the risk of *underperformance*, *coordination problems* and *opportunistic behavior* as much as possible. According to Hogan, this route to “increase our net worth [is] a smarter way […], when you look at net worth, frequent flyer, and unit-cost reduction” (Schaal, 2015). By selecting the partners of its equity alliance, Etihad Airways can also minimize overlap with its current routs, because they otherwise might cut into the airlines profitable route network. The airline furthermore can leverage its equity partners’ management teams, thereby avoiding higher than anticipated management costs while assuring that decisions are made as quickly as possible.

**Qatar Airways**

Qatar Airways, the national airline of Qatar, started operations in 1994. After operating as a small regional carrier for three years, it was re-launched as a global carrier under the mandate of Sheikh Hamad bin Khalifa Al Thani. Today, the State of Qatar holds a 50% stake in the airline, while the rest of it belongs to various private investors. In 2007, Qatar Airways launched flights to North America servicing New York and Washington DC, followed by Australia in 2009. After launching the first routes to Buenos Aires and Sao Paulo in South America, Qatar Airways became one of the few airlines to fly to all six inhabited continents. In 2011, Qatar Airways established its 100$^{th}$ destination in Aleppo, Syria. Today, it serves 150 destinations. Its modern fleet and its geographical location give it similar advantages as Emirates and Etihad Airways. In 2012, Qatar Airways was elected to become a member of the global airline alliance, oneworld. After twelve months of negotiations, in 2013 Qatar Airways officially became the only airline of the three major gulf carriers to join an alliance. The objective named by Akbar Al Baker, CEO of the airline, was to strengthen its competitiveness and increase customer appeal through the extended network, including increased access to the transatlantic market and bonus programs (Qatar

Airways, 2013). Qatar Airways also operates 15 codeshares and owns a 15.01% stake in IAG, the parent company of British Airways and Iberia. AIG is important for Qatar Airways, because it provides access to an extensive North American network from London and Madrid airports. Therefore, Al Baker announced the possibility of expanding further, within the EU's limit of a 49% stake for foreign investors (Pitas & McKay, 2016).

Although flying to nearly as many destinations and countries as Emirates, Qatar Airways transported a significantly smaller number of passengers in the financial year 2015/2016, and in previous years. With 26.6 million passengers, it was far behind Emirates, which carried 51.9 million passengers, but ahead of Etihad Airways with 17.6 million passengers (see Appendix E: Gulf carrier overview).

As analyzed above, both Emirates and Etihad Airways have substantive reasons not to join a global airline alliance. The following section will examine why Qatar Airways is the only major gulf airline that decided to do the opposite and join the oneworld alliance.

*Knowledge and capability sharing* is one of the most important reasons according to CEO Al Baker, as can be derived from an article posted in The Peninsula (2015). In his opening speech of oneworld's first "Operations Control Conference", Al Baker pointed out that it is "important for [Qatar Airways] to contribute as much as [they] can in all areas of [their] business, including operations [-] the backbone of all airlines". This conference was held to enable the collaboration of specialists in each area of business and share "their tremendous experience and best practices in operations". The argumentation is in line with the established theory presented in this paper. By collaborating in the form of an alliance, and by sharing complementary skills and talents with their partners, Qatar Airways is keen on improving operations in a way that will ultimately "benefit not just its business, but just as importantly, [its] passengers in the long run" (The Peninsula, 2015), thereby generating a competitive advantage (Eisenhardt & Schoonhoven, 1996). Furthermore, cooperating closely and exchanging information on a regular basis also helps the airline to reduce the risk of *negative spillover*. Helmut Weixler, COO of Qatar Airways argues, similarly to Dyer and Nobeoka (2000), that collaborating in the form of a multilateral alliance, gives each partner the chance to contribute to and profit from the broad pool of knowledge of the various partners (The Peninsula, 2015). However, according to the available information, Qatar Airways does not seem to be afraid of *unintended knowledge transfer* or the *diminishing diversity of knowledge* over time.

Although they have a global network, Qatar Airways struggles to bring in as many passengers as Emirates. Therefore, accessing the network of its fellow oneworld members seems a viable option to change this fact. Two years after joining oneworld, Al Baker sees proof for this step. He says that the *exchange of complementary assets* (in this case the route network of the airlines), "expanded the number of oneworld destinations" by 21%. Furthermore, the "interline revenue secured for the membership of oneworld for all member airlines cumulatively" increased by 135% year-over-year (Kingsley-Jones, 2014). In addition, Qatar Airways is, as mentioned earlier in this paper, invested with a 15.1% equity stake in IAG, the parent company of British Airways and Iberia, which provides access to an extensive North American network at London and Madrid airports (Pitas & McKay, 2016).

There are very few public mentions of the "*distribute risks and share costs*" objective of joining an alliance by Qatar Airways executives. This may partially be due to the strong financial situation, based on its state funding. However, as seen in the previous paragraphs, Qatar Airways is very much interested in sharing knowledge and capabilities, which will eventually lead to lower operation costs. In addition, the creation of "far better facilities than any of [the members] could justify on their own, and at better unit costs" is a key objective for collaboration of the oneworld alliance, as posted on their website. It enables the member airlines to *increase their efficiency and create synergies*. Overall, oneworld members "have combined ticket offices, check-in facilities and/or lounges at some 50 airports worldwide" (oneworld, 2016).

Similar to the other two gulf carriers, Qatar Airways has a high reputation and is known for its safety and punctuality (Amey, 2015). However, its hub in Doha is a less popular tourist destination than the hubs of Emirates and Etihad Airways. According to an analysis of CAPA (2015), "Qatar's Doha hub attracts less point to point traffic than […] Emirates in Dubai". Both its gulf peers only serve their local hubs in Dubai and Abu Dhabi, respectively. This, and Qatar Airways' focus on business travelers who pay attention to redemption opportunities such as loyalty programs of alliances, makes joining an alliance a viable option to *improve its status* among travelers.

As pointed out, it is important for Qatar Airways to develop and expand its route network in order to stay competitive. It employs both the oneworld alliance, which, according to an interview with oneworld CEO Bruce Ashby aims at becoming the most connected and relevant [alliance] for the top business centers in the world", and equity investments such as the 15.01% stake in AIG in order to ultimately *change the competitive landscape*. Due to EU restrictions, it is not possible to own more than a 50% stake in European airlines. Therefore, its investment cannot be attributed to the motive to *ensure the opportunity to acquire target*. Furthermore, the oneworld alliance does not involve any equity investment. Since oneworld is not operating in the cargo sector, the cooperation focuses on the passenger segment, like Emirates and Etihad Airways do. Therefore, *entering new markets* is not an applicable motive for Qatar Airways to join an alliance.

For Qatar Airways, as much as for Emirates and Etihad, *expanding internationally* is one of the quickest ways to achieve sustainable growth. However, Doha (Qatar) does not naturally attract as many tourists as Dubai or Abu Dhabi, which is why Qatar Airways needs to increase its route network to attract business customers. As mentioned earlier, an alliance can be the quickest way to add new destinations and to *conform to foreign government policy*.

Similar to the other two gulf carriers, the *sharing of capital* is not an applicable motive for Qatar Airways to join oneworld. First, the oneworld alliance is contract based, rather than equity based and, as described earlier, mainly focused on sharing operational facilities and exchanging complementary assets. Moreover, Qatar Airways signaled with its purchases of major European airlines that it has significant capital on hand – mainly due to the Emirate Qatar's partial ownership of the airline and the ruling families influence.

One of the key factors for Qatar Airways' membership in oneworld is, according to CEO Al Baker, the more flexible approach the alliance takes, compared to the Star Alliance and SkyTeam. The possibility to form partnerships inside and outside of the alliance gives Qatar Airways' the option to avoid a significant *partner dependence* on oneworld. However, by joining the alliance, Qatar needs assure that its partnerships are not "detrimental to […] oneworld partners" (Kingsley-Jones, 2014). Furthermore, Akbar Al Baker states, "the reason we are so excited about oneworld is that it is the only one of the three alliances that does not interfere with your network development or who you codeshare with".

Oneworld is the smallest of the three alliances and has the fewest members, which can be seen as an indicator that the risk of partner redundancy is less than in the other global airline alliances. However, *opportunistic behavior* is a present risk as could recently be observed. In 2015, Al Baker has “threatened to exit the oneworld alliance because of actions that he said were taken by fellow member American Airlines Group Inc. to block his carrier’s business“ (Wall & Ostrower, 2015). He said that “there is no point in […] being in oneworld if an airline that invited [and] hosted [them] in America to sign the entry to oneworld, is today going against [them]” (Wall & Ostrower, 2015).

The oneworld alliance was founded in 1999. Therefore, when joining the alliance management structures were already set up and in place for many years, implying a reduced risk of *coordination problems* and *higher than anticipated management costs*. Furthermore, a lot of information about the firms is available and, through the long and existing cooperation of the oneworld alliance, the risk of *underperformance* is reduced, however still present.

## 4.4 Overview of the case study results

For a better overview of the case studies, the results for the carrier specific evaluation of the motivations (Table 4) and downsides (Table 5) are presented below.

**Table 4: Carrier specific evaluation of motivations**

| Motivation | Emirates | Etihad Airways | Qatar Airways |
|---|---|---|---|
| Share knowledge and capabilities | n/a: Dependency risks outweigh benefits, not necessary because of low cost structure | Joint training and operations facilities | Initiated “Operations Control Conference” to share expert knowledge among alliance partners |
| Exchange complementary assets | In general, does not fit with management’s organic growth strategy | Access feeder traffic from smaller airlines | Necessary to bring more business passengers in, as Doha is not as popular among tourists |
| Distribute risks and share costs | Very low cost structure, have size to achieve economies of scale | Very low cost structure, aim to reduce duplicate overhead in equity alliance | Very low cost structure, but cost sharing is one of the oneworld alliance’s main objectives through combined ticket offices, check-in facilities and lounges |

| | | | |
|---|---|---|---|
| Improve legitimacy and reputation | n/a: World renowned airline | n/a: World renowned airline | Also world renowned airline, but less popular among tourists. Reputation for business travelers through better loyalty programs, etc. |
| Influence competitive landscape | n/a: High impact through low fares and high quality of services | Buy stake of financially challenged airlines but with valuable route networks, to put pressure on local competitors | Qatar helps oneworld to become the most connected and relevant alliance for business travelers |
| Ensure opportunity to acquire target | n/a: Not more than 50% of an airline can be owned in most states | | |
| Enter new markets | n/a: Alliances considered in this research only operate in the passenger transport segment | | |
| Expand internationally | Cooperation in rare instances, otherwise lobby for fifth/ sixth freedom right and exploit existing routes | Bring in more tourists through access to new destinations and feeder traffic | Alliance provides access to business travelers |
| Conform to foreign government policy | Cooperation in rare instances, otherwise lobby for fifth/ sixth freedom right and exploit existing routes | Mixture of alliance and expansion approach: Buying max. allowed stake in airlines | Allying only (quick) way to access some markets |
| Increase efficiency and realize synergies | n/a: Very low cost structure due to new fleet, low taxes, etc. → have size to achieve Economies of Scale | Joint training facilities of equity partners, "looking for centers of excellence" to reduce duplicate overhead | Operation Control Conference to exchange best practices of industry leaders within the alliance. Oneworld shares lounges and operational facilities |
| Share capital | n/a: Due to significant support and investment of the states | | |

**Table 5: Carrier specific evaluation of downsides**

| Downside | Emirates | Etihad Airways | Qatar Airways |
|---|---|---|---|
| Unintended knowledge transfer | *No information available* | Not a big factor in the alliance decision | Not a big factor in the alliance decision |
| Diminishing diversity of knowledge | *No information available* | Not a big factor in the alliance decision | Not a big factor in the alliance decision |

| | | | |
|---|---|---|---|
| Partner dependence | Threat to independence and flexibility | Limiting own dependence through "one-way" equity investments | Oneworld's more flexible approach allows partnerships in- and outside of alliance |
| Partner redundancy | Overlap of routes / sacrificing traffic for the alliance | Investment in strategically important regions (not more as in alliance) | Oneworld is the smallest of the global airline alliances |
| Opportunistic behavior | *No information available* | Limited through equity involvement | Occurred once with American Airlines, present risk for Qatar |
| Negative spillover | Threat to its reputation and high quality of service | Joint training and operations facilities to reduce this risk | Initiating knowledge and capability sharing |
| Underperformance | Threat to its reputation and high quality of service | Limited through equity involvement | Cooperation within oneworld alliance has been going for many years |
| Coordination problems | *No information available* | Limited through equity involvement | Management structures in oneworld alliance already in place and working |
| Higher than anticipated management costs | *No information available* | Leverage through equity ownership, assuring decisions to be made as quick as possible | Management structures in oneworld alliance already in place and working |

Summarizing, the analysis shows that although all gulf carriers make use of interfirm cooperation, Etihad Airways is the one that relies on it the most, especially with respect to growth. Instead of a "traditional" membership in global airline alliances, they rather focus on collaborations that involve equity stakes in all of their partners.

## 5 Discussion

The different strategic involvements in alliances and the distinct designs of alliance structures illustrate the impact of each management's assessment or perception of potential opportunities and risks. Prior literature gives little indication, which factors specifically influence the airline's perception of motivations and downsides and therefore the design of the cooperation. This paper assumes that the relative importance of the motivations and downsides varies with several underlying key factors. Based on the literature review and its reflection against individual case-companies, the findings suggest that the key factors are airline cost structure, network structure, target passenger group, alliance type, alliance governance, and partner characteristics. Some of the key factors were already included in the conceptual framework presented in chapter 4. However, it needs to be advanced with the aforementioned empirical insights (see figure 3).

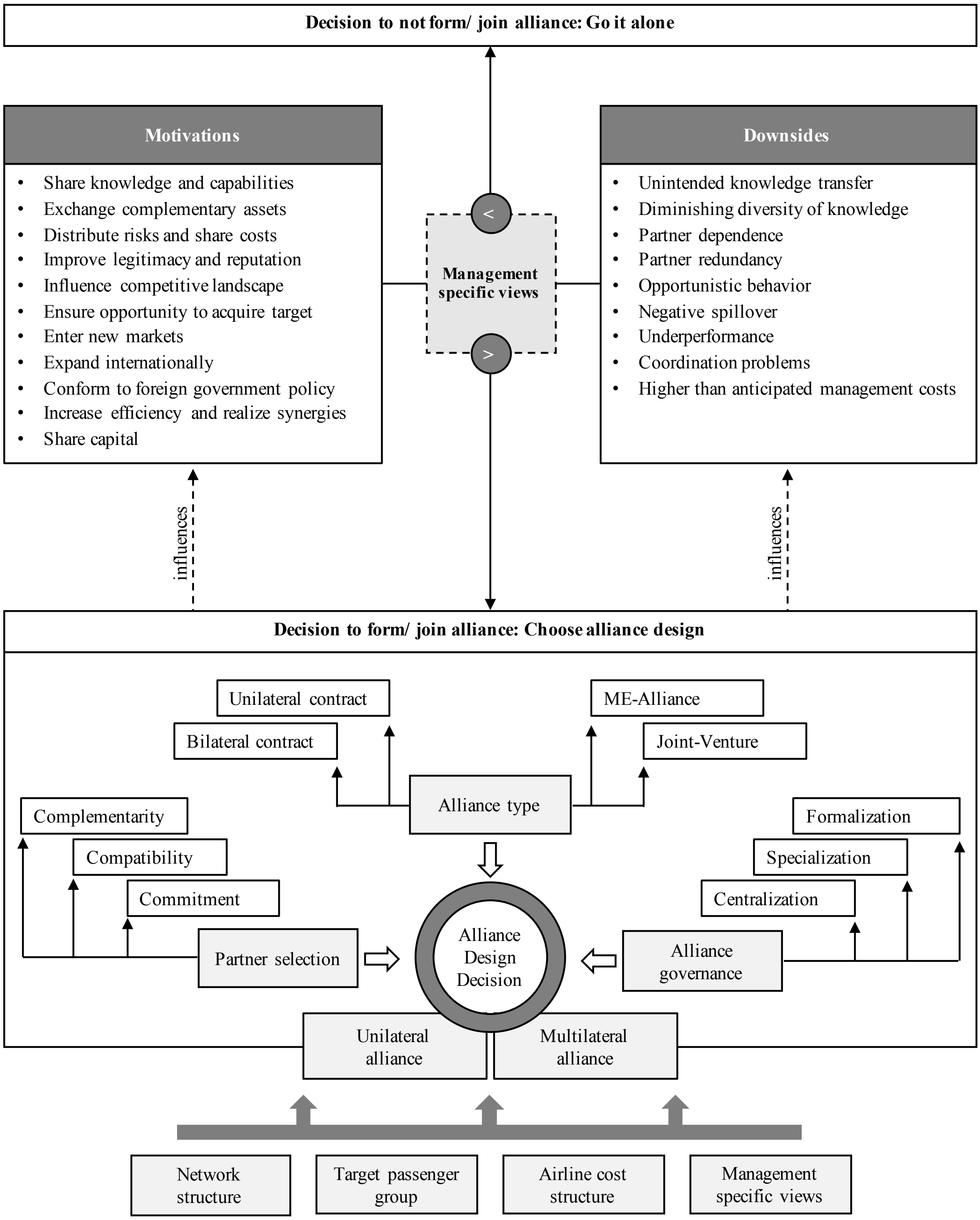


**Figure 3: Conceptual framework with underlying key factors**

**Airline cost structure**

One of the main distinguishing factors of gulf carriers, compared to network carriers, is their very low cost structure. The overhead of Lufthansa and other network carriers is significantly higher, in which case cost sharing is much more likely to be the dominant or a very relevant objective for allying (Sakakibara, 1997). Although gulf carriers realize cost savings and economies of scale wherever possible (Etihad Airways' joint training facilities and Qatar's Operation Control Conference), network access is much more crucial to the alliance decision. As determined in the case study, the incentive to ally in order to distribute risks and share costs and/ or to increase efficiency and realize synergies is small and rather a side benefit of the main reasons to join an alliance for the gulf carriers. Therefore, the following is proposed:

***Proposition 1:*** *If the cost structure of an airline is significantly lower than the industry average, the airline is less likely to join a global airline alliance.*

**Network structure**

The main reasons why the management of Emirates and Etihad Airways opposes the decision to join an alliance is the limitation to grow only in areas that also benefit other alliance partners, or at least does not harm them. Although existing research, such as the studies by Iatrou and Oretti (2012), Jangkrajarng (2011), and Oum and Park (1997), suggests that an alliance serves as a means to expand an airlines market, the gulf carriers show that it is possible to also significantly grow through the freedom rights and bilateral agreements with the respective countries. This type of growth is what the management team of Emirates calls organic or sustainable growth. One significant disadvantage for global airline alliances is that they require the airlines to go through the hub of the airline responsible for the local market, thereby limiting further expansion to new markets of the alliance. It can therefore be assumed that further deregulation will increase competition and give gulf carriers significant points to attack.

***Proposition 2:*** *If less institutional barriers exist in the (aviation) market, airlines are more likely to form competitive coalitions then to form/ join global airline alliances.*

### Target passenger group

The target passenger group is, as shown in the case study, closely related to the aim to expand internationally. The airlines choose the new destinations based on their main type of customer, which also influences the form of inter-organizational cooperation. Furthermore, the gulf carriers implement new destinations in regions that are underserved or not served at all by network carriers. These destinations – called secondary cities – possess great potential, as the gulf carriers can specifically tailor their offering to the needs of the leisure and/or business travelers and become a new option for them to connect. As previously suggested, the gulf carriers, i.e. Emirates and Etihad Airways, would not be able to access these destinations if they were a part of a global airline alliance.

***Proposition 3:*** *Airlines that aim at offering a more diversified destination portfolio are less likely to become part of a global airline alliance, and rather form their own cooperative agreements.*

### Alliance type

The case study shows that although the gulf carriers' involvement in alliances varies significantly, none of them disregards inter-organizational cooperation completely. The type of alliance is what separates the different strategies. While Emirates prefers very few bilateral codeshare agreements (and a joint venture with Qantas, with very limited scope), Etihad Airways has acquired significant equity stakes of its equity partner airlines and Qatar Airways is part of the oneworld alliance. Qatar Airways' oneworld involvement is contract-based and therefore much more flexible. However, as discussed before, Qatar Airways already experienced the risks of less commitment in the form of American Airlines' opportunism. The empirical evidence from the case study supports the claims of Wassmer, Dussauge, and Planellas (2010) and Wassmer and Dussauge (2012) that joining an alliance alone does not create value itself, but rather the correct alignment and configuration of the alliance portfolio. Each airline itself needs to adapt its cooperation in a way in which it best sees fit.

The gulf carriers are focused on staying autonomous and avoiding dependencies. By conducting minority equity investments, they avoid the typical problems that non-equity alliances bring with them, as for example pointed out by T. K. Das and Teng (1996). Although following different strategies, Emirates and Etihad Airways both focus on building long-term relationships to expand their network, especially Etihad Airways employing equity ownership as a key factor in its expansion strategy. The equity stakes Etihad Airways acquired over the last years has led to a cross-border merger type of situation, meaning that it has a significant leverage on its equity partners, further magnified through their financial situation – within the regulatory boundaries of not owning more than 49% of an airline. Alliances of this kind where one airline acts as a leader might become more important in the next years, as long as actual mergers are restricted.

***Proposition 4:*** *An alliance between an airline with a strong financial situation and a financially challenged airline leads, if it includes a significant equity investment, to a merger type of situation.*

**Alliance governance**

According to the model by Albers (2010) that was presented earlier in this study, the three structural dimensions to consider in the alliance governance are the degrees of centralization, specialization, and formalization. As Qatar Airways' CEO Al Baker said, the main reason Qatar Airways opted to join oneworld was their more flexible approach, compared to the Star Alliance or SkyTeam (Iatrou & Oretti, 2016; Kingsley-Jones, 2014; Pilling, 2005).

As abovementioned, the setup of the oneworld alliance, with a high centralization and specialization is in line with the Star Alliance and SkyTeam (Albers, Koch, & Ruff, 2005; Star Alliance, 2016b; Tjemkes, Vos, & Burgers, 2013). The difference between the alliances is in the formalization, where oneworld provides its members with more flexibility than Star Alliance and SkyTeam. In general, if the formalization and specialization is high, it becomes less important to find a perfect partner in regards to partner compatibility and commitment. This is due to the fact that more attention is paid to control mechanisms and the existence of mediators, such as the alliance manager and support staff. These alliance functions can help to reduce information asymmetries and enhance communication. Therefore, only partners willing to commit to such a system will attempt to join such an alliance. In other words:

***Proposition 5:*** *Airline alliances with complex governance systems (high formalization and specialization) will have member airlines with a high commitment to the alliance.*

However, following the strategy of oneworld and the argumentation of Qatar Airways, a lower formalization will positively affect the growth of the individual member airlines, while still providing the general advantages of the other global airline alliances, such as synergy effects, better connections for customers and enhanced frequent flier programs, which lead to proposition 6:

***Proposition 6:*** *Member airlines of alliances with a less formalized governance structure will have higher individual growth rates than member airlines of alliances with highly formalized governance structures.*

**Partner characteristics**

The problem between Qatar Airways and American Airlines that was discussed in this case does confirm existing theory, which suggests that alliance partners who maintain cooperation outside the strategic alliance have a lower commitment to the alliance itself, which at some point may lead to problems within the alliance (Jones, Hesterly, Fladmoe-Lindquist, & Borgatti, 1998; Lavie et al., 2007). However, contrary to Lazzarini's (2008) assumption that such airlines would avoid multilateral alliances in order to maintain their ties to other partners, the case of the oneworld alliance with 17 years of operation since 1999 shows that – besides some issues – an alliance can be stable, even with such a setup. This shows that other factors besides the partner commitment are important for a successful collaboration. In the literature review of this study, these were determined to be partner complementarity and partner compatibility (Kale & Singh, 2009; Shah & Swaminathan, 2008). Besides the open approach of oneworld, there are several deep ties, such as joint ventures, that grew out of the cooperation within the alliance. This shows that less commitment does not necessarily jeopardize the strategic alliance. It rather suggests that the other two factors may be able to compensate for an initial deficit in commitment. As such, a high partner complementarity within the alliance would, in the case of airline alliances for example indicate very different route networks, may be able to compensate less commitment. As each partner has to pass extensive screening before being admitted to a global airline alliance, the compatibility of the partners in terms of organizational culture and communication should assure that there is a high compatibility, i.e. between the new member and the alliance group.

***Proposition** 7: A low commitment to the alliance, in the form of cooperation with outside partners, may not harm the alliance if partner complementarity and compatibility is high.*

Beside the key factors analyzed above, the development of competitive coalitions in the aviation industry is an interesting phenomenon observed in this study. The concept of competitive coalitions, as described by Doz and Hamel (1998) fits very well to the strategy of the gulf carriers. Etihad Airways, for example, with its equity partner alliances appears to have already formed a competitive coalition. Emirates is on the same track, but is forming the coalition with fewer partners, while Qatar Airways is still building cooperation with several partners inside and outside the alliance. If the suggested evolution by Doz and Hamel (1998) is correct, which this case study indicates, than this provides interesting implications for the upcoming development of the aviation industry. The deeper cooperation through joint ventures allows the airlines to further integrate cost and revenue sharing mechanisms and therefore, as the alliance moves closer to the setup of a single firm, reduces the transaction costs. Thus, competitive coalitions become increasingly important, as well as more economically valuable than multilateral alliances, therefore influencing the decision to join an alliance.

***Proposition 8:** Airlines that form or join competitive coalitions of few, very heterogenic airlines, outperform members of global airline alliances in terms of revenue and growth rates.*

## 6 Conclusion

The purpose of this study has been to synthesize the existing literature on motivations and downsides of allying and to apply them to gulf carriers. The underlying assumption was that a variety of factors influence the "to ally or not" decision. Based on the thorough search of EBSCO's business source complete with 2,027 relevant search results, four main categories of the reasons to ally were derived, namely: innovation, market consolidation, business expansion, and business operation. Each of these categories was further reduced to more specific and tangible motivations. As stated previously, several studies exist that summarize the motivations and downsides of joining an alliance, however none of them provided a systemic synthesis. Furthermore, the majority of studies only analyze up to three motivations and/ or downsides in one study. The analysis also confirms the prior assumption that little attention has been given to the downsides.

The identified motivations in the category of innovation revolve around motivations related to new product development and knowledge sharing. Through alliances, companies aim to share knowledge and capabilities in order to access complementary skill sets and talents, and ultimately develop new technologies and/or services (e.g. Contractor & Lorange, 1988; Eisenhardt & Schoonhoven, 1996). The exchange and access of complementary assets attempts to fill resource gaps, which cannot be easily filled with arms-length market transactions. Another objective may be to push the development of a new product/ expand the current product range, which is hard to accomplish without a partner (e.g. Ahuja, 2000; Chung et al., 2000; Gomes-Casseres, 1994).

Alliances are also used to distribute risks and share costs when, for example the new product development process inherits significant risks of failure, that one company alone does not or cannot undertake. With regard to the category of market consolidation, the intention to change the market environment by increasing the company's market power and/ or position through cooperation with other companies is the leading force. More specifically, this can be achieved through improving the legitimacy and reputation as new markets entrants may face credibility and trust hurdles, which alliances can help to overcome (e.g. Baum et al., 2000; Eisenhardt & Schoonhoven, 1996; Stuart, 2000).

In addition, alliances can be the vehicle of choice to influence the competitive landscape, as two or more companies can exert their market power together and therefore achieve cheaper purchasing rates from suppliers or simply draw competitors out of the market (e.g. Fuller & Porter, 1986; Gomes-Casseres, 1994). If a takeover of a company is not feasible or possible at the moment, alliances can also ensure the opportunity to acquire a target, if one alliance partner purchases equity of the other, thereby positioning itself for a takeover (e.g. Folta, 1998).

In the case where markets are inaccessible or heavily regulated, alliances can also foster business expansion. New markets can be entered and products can be sold either through the alliance partner or the company itself with help and justification of the partner (e.g.

Mitchell et al., 2002; Reuer & Tong, 2010). In heavily regulated or culturally distant environments, alliances can significantly reduce the time it takes to expand internationally and increase the rate of success" (e.g. Glaister & Buckley, 1996; Gomes-Casseres, 1994; Hill et al., 1990). Similarly, especially in the highly regulated environment, alliances can be the only way to conform to foreign government policy. From a business operational perspective, inter-organizational cooperation helps to increase efficiency and realize synergies through joint activities and internalization of market transaction, as well as sharing capital when costs of capital or investments are specifically high (e.g. Dyer & Singh, 1998; Eisenhardt & Schoonhoven, 1996; Gulati, 1999; Hitt et al., 2000; Miles & Snow, 1984).

Like the motivations, the synthesized downsides of allying are also clustered into categories, namely: innovation, market consolidation and business expansion, and business operation. These categories are also reduced to more specific and tangible downsides.

Innovational activities bear the risks of unintended knowledge transfer of critical knowledge and competencies. Cooperation requires the partners to provide access to their respective knowledge pools, which bears the risk of unintended spillover (e.g. Hamel et al., 1989; Kale et al., 2000; Williamson, 1991). Furthermore, the pool of knowledge that is shared may diminish over time, leading to a depreciation of the value of cooperation as the cooperating firms become increasingly alike (e.g. Dyer & Nobeoka, 2000).

Market consolidation and business expansion related downsides include risks associated with changing market environments and new (international) market entries. Intense cooperation may leave one of the partners dependent on the other, either through high switching costs or because distinct capabilities in the area that the partner manages decrease (e.g. Hamel et al., 1989; Nooteboom et al., 1997). In a longer cooperation, partners tend to become more and more alike, in terms of their once heterogeneous pools of knowledge, or in the multilateral case through the addition of new partners that partially possess the same or similar knowledge (e.g. Baum et al., 2000; Luo & Deng, 2009).

Alliances also always inherent the risk of opportunistic behavior, meaning the chance that one of the partners takes a chance at the expense of another partner (e.g. Gulati, 1998; Mudambi & Tallman, 2010). In addition, negative spillover effects, due to one partner's insufficient service or quality of products may also harm the companies involved in the alliance (e.g. Bourdeau et al., 2007; Ozmel et al., 2013). From a business operation standpoint, alliance partners may (unintentionally) not perform as expected. This underperformance may become apparent through goals that are not achieved, deadlines that are not met, or lacking commitment to the common objectives of the alliance (e.g. T. K. Das & Teng, 1996; Gopalakrishnan et al., 2008; Mariti & Smiley, 1983; Sakakibara, 1997). If the alliance partners fail to coordinate their activities sufficiently, the resulting problems will lead to a diminishing effectiveness of the alliance (e.g. Gomes-Casseres, 1994). Finally, higher than anticipated management costs can result from insufficient or ineffective governance mechanisms (e.g. Hoetker & Mellewigt, 2009; Lavie et al., 2007).

The analysis has not only conducted a meta-analysis of the different motivations and downsides of joining an alliance, but it has also included the theoretical lenses most commonly used when analyzing the motives and downsides. The resource-based view, the theory of organizational learning, the social network theory, and the transaction cost theory are the four theories that are most commonly used by researchers and together make up 69% of the total studies analyzed. The remaining 31% of the studies include arguments from strategic management (such as competitive force and dynamic capabilities), the knowledge-based view, the real options theory, and the agency theory. As aforementioned, the majority of studies are empirical in nature, and determine the alliance outcomes measured on the basis of one objective (e.g. share knowledge and capabilities). Determining specific motives and downsides and their impact is seldom the main focus of a study (e.g. Glaister & Buckley, 1996; Sakakibara, 1997).

The majority of the findings are based on dyadic alliances, therefore this study attempted to also take current research of multilateral alliances and alliance portfolios into account. Overall, similar chances and risks persist in the multilateral perspective. However, both are magnified when a higher number of partners are involved. Greater combined knowledge pools may more quickly lead to innovations and collaboration opportunities, and synergies can be realized as companies combine their business support activities, but it can also increase the effect of the downsides summarized above (e.g. Ding et al., 2013; Doz & Hamel, 1998; Khanna et al., 1998; Nooteboom et al., 1997; Soh, 2010). Overall, balancing cooperation and competition is a highly challenging task for the alliance in this case and the so called "coopetition" is one of the recently emerging fields of research (e.g. Bengtsson & Kock, 2000; Brandenburger & Nalebuff, 2011; Himpel, 2012; Nalebuff, Brandenburger, & Maulana, 1996; Tsai, 2002).

The case study yielded several insights on why Emirates and Etihad Airways choose not to join any of the global airline alliances. While prior literature gives little indication, which factors specifically influence the airline's perception of motivations and downsides in the aviation industry, this study suggests several underlying factors for the alliance decision, namely: the airline cost structure, network structure, target passenger group, alliance type, alliance governance, and partner characteristics. On a more general note, it can be summarized that Emirates has very little incentive to join a global airline alliance due to its exceptional position as the biggest gulf carrier with great (state backed) financial resources. The management specific views, which reject the option to ally, also plays a major role in Emirates' refusal to join an alliance. However, as shown, this does not mean that Emirates disregards cooperation completely. Its revenue-sharing partnership with Qantas, as well as a very selective codesharing network, indicate that Emirates will choose to work with partners when it benefits them, even if the cases are rare.

For Etihad Airways, there are certain valuable benefits to join an alliance, even though the management has a critical view towards the global airline alliances. This argument leads to the explanation of the decision to form an equity alliance with much more control over its partners in order to limit exposure of the disadvantages of traditional alliance formations. Forming its own equity alliance allows Etihad Airways to shift the group's fleet of about 700 aircrafts between the partners as needed. More importantly, it allows Etihad to access markets, whereas obtaining fifth, sixth, or seventh freedom rights would have taken much longer. Qatar Airways' decision to join the oneworld global airline alliance is also mainly based on the objective to access new markets and expand its route network for valuable business travelers. The choice can also be explained by the unique setup of the oneworld alliance. As discussed, the lower standardization of the oneworld alliance compared to the Star Alliance and SkyTeam gives its members more options to cooperate outside of the alliance and keep a higher level of autonomy.

Based on the knowledge gained through conducting the case study, several general reasons for Emirates' and Etihad Airways' decision not to join a global airline alliance can be derived. First, although not one of the main factors for the thriving gulf carriers, the good strategic position of the hubs is an enabler of their strategy. Second, the gulf carriers mainly offer medium- and long-haul flights, with little to no unprofitable short distance flights. These flights are carried out by codesharing partners (Emirates) or alliances partners in the oneworld alliance (Qatar Airways) and Etihad's equity partner alliance. Third, the gulf carriers value autonomy, reflected in their choices to either not ally at all or choose alliance designs that benefit them while maintaining control. Fourth, active partnerships are essential in the gulf carriers' strategy. Emirates maintains a very small partner portfolio, as is the case for Etihad Airways, too. Qatar Airways also has only limited partners outside the oneworld alliance and takes great care during the selection process. Fifth, the gulf airlines profit from the ongoing deregulation of the industry, enabling forms of cooperation and expansion that would not have been possible at the turn of the millennium when the global airline alliances were founded. Sixth, complementary networks are a very important criterion for the alliance partner selection whereby the gulf carriers avoid route overlaps. Seventh, gulf carriers expand their network not only to primary cities, but also through secondary cities that are currently underserved. In addition, they employ seventh freedom rights to expand their route network not only through new spokes that are directly connected to the hub, but also indirectly. Finally, the business friendly environment in the gulf states, with less regulatory demands and taxes, as well as lower labor costs compared to other markets, combined with significant investments of the states, provides these carriers with a competitive advantage.

Contrary to what was long the prevailing view in the aviation industry, the gulf carriers show that good firm performance without joining a global airline alliance is possible, potentially causing a paradigm shift in the industry and kick starting an era of fewer but closer collaborations, as anticipated by Hamel et al. (1989). The application of the motivations and downsides to the case showed, that the organic growth strategy fits very well within existing alliance theory, and the strategic differences between traditional network carriers and the gulf carriers mainly lay in the management specific views and their more advanced perception of how alliances are set up. This is fostered through their recent expansion, which started way after the establishment of the global airline alliances and which may limit other network carriers through partner dependence (e.g. lock-in effects) and other factors discussed in this study to follow a similar strategy. The assumption of Emirates' and Etihad Airways' management that (global) airline alliances hinder growth is mainly based on their aim to avoid partner dependencies in terms of network development, negative spillovers and opportunistic behaviors.

Inevitably, due to the type of this study and its scope, there are several limitations to this study. First, the approach of the literature review limited the results to journals with an A-ranking or higher, according to the VHB-JOURQUAL3, which inevitable left other excellent management journals and articles published in them out of the picture. Second, the material for the case study was obtained from secondary sources. Due to missing access to the management of the gulf carriers, no interviews to discuss their specific thinking on single motives and downsides could be conducted. Finally, the information used in the case was of only qualitative nature. A further analysis using qualitative and quantitative data might shed further light on the issue.

**Practical implications**

The findings in this study also provide some insights for management. The most likely scenario for the further evolvement of the airline industry seems to be a slow, but steady, deregulation of the industry. In the meantime, joint ventures and equity investments will become increasingly important to access aspiring markets such as Africa, China, or India, while mergers are still prohibited by regulatory authorities. It is likely that also airlines that currently are members in global airline alliances, will increasingly attempt to form joint ventures. An example of this can be observed at the time of writing this study, with Lufthansa taking over 1/3 of AirBerlin's flights (Flottau, 2016). It is important for management in the airline business to closely observe the developments and assess the increasingly feasible option to joint venture that was not possible when the global airline alliances were founded. It is not likely that there will be a disruptive change in the industry, but the global airline alliance's survival will significantly depend on how their ability to deepen cooperation and limit partner redundancy within the alliance. The gulf carriers lead the way in this regard, and Etihad is a step ahead of the competition on this timeline, since they already form competitive coalitions, instead of joining a multi-partner alliance.

**Future research**

The studies analyzed in the literature review mainly focus on alliances between only two parties. Even though, as discussed, the results are applicable to the multilateral case, future research should further analyze the results with specific attention to multi-partner alliances. Overall, the findings imply that existing theory is outdated with regard to airline alliances. Carriers that do not join a global airline alliance are no longer isolated, nor are they in a unfavorable competitive position (Button et al., 1998; Mak & Go, 1995). Moreover, it would be a stretch to call Emirates and Etihad Airways niche players, because of their avoidance of global airline alliances. However, other factors, such as the gulf carrier's reliance on the heavy subsidies of the gulf states, should be kept in mind (Oum & Park, 1997).

In addition, due to the limited scope of this study, much more could have been written on the results of the systemic literature review. Future research may continue on this path and focus on the theoretical background of the motivations and downsides. Last but not least, several propositions were developed in this study and suggestions were made with regards to the varying relative importance of the motivations and downsides based on the underlying key factors airline cost structure, network structure, target passenger group, alliance type, alliance governance, and partner characteristics. These propositions should at some point be empirically tested.

## Appendix A: Global airline alliance overview

| | Star Alliance | SkyTeam | oneworld |
|---|---|---|---|
| Founded in | 1997 | 1999 | 1999 |
| Revenue | $196bn | $156bn | $148bn |
| Operating profit | $8.9bn | $4.2bn | $4.0bn |
| Net profit | $3.7bn | $0.5bn | $2.1bn |
| Destinations | 1,213 | 1,037 | 954 |
| Countries served | 192 | 177 | 154 |
| # of members | 28 | 20 | 15 |
| Market share | 24.0% | 20.8% | 19.0% |
| Capacity (ASK) | 38.8bn | 31.3bn | 28.5bn |

ASK = Available seat kilometer

Source: Adapted from Dunn (2015, p. 41)

## Appendix B: Star Alliance member airlines

| Airline | Country | Hubs | Member Since | IATA |
|---|---|---|---|---|
| Adria Airways | Slovenia | Ljubljana | 2004 | JP |
| Aegean Airlines | Greece | Athens, Thessaloniki, Heraklion | 2010 | A3 |
| Air Canada | Canada | Calgary, Montréal, Toronto & Vancouver | 1997 | AC |
| Air China | China | Beijing, Chengdu, Shanghai & Guangzhou | 2007 | CA |
| Air India | India | Mumbai, New Delhi, Kolkata | 2014 | AI |
| Air New Zealand | New Zealand | Auckland | 1999 | NZ |
| All Nippon Airways | Japan | Tokyo, Osaka | 1999 | NH |
| Asiana Airlines | South Korea | Seoul, Incheon | 2003 | OZ |
| Austrian Airlines | Austria | Vienna | 2000 | OS |
| Avianca | Colombia, El Salvador, and Peru | Bogotá, San Salvador, and Lima | 2012 | AV |
| Brussels Airlines | Belgium | Brussels | 2015 | SN |
| Copa Airlines | Panama | Panama City | 2012 | CM |
| Croatia Airlines | Croatia | Zagreb | 2004 | OU |
| Egypt Air | Egypt | Cairo | 2008 | MS |
| EVA Airways | Taiwan | Taipei | 2013 | BR |
| Ethiopian Airlines | Ethiopia | Addis Ababa | 2009 | ET |
| LOT | Poland | Warsaw | 2003 | LO |
| Lufthansa | Germany | Frankfurt & Munich | 1997 | LH |
| SAS | Denmark, Norway, Sweden | Copenhagen, Oslo & Stockholm | 1997 | SK |
| Shenzhen Airlines | China | Shenzhen | 2012 | ZH |
| Singapore Airlines | Singapore | Singapore | 2000 | SQ |
| South African Airways | South Africa | Johannesburg, Cape Town | 2006 | SA |
| Swiss International | Switzerland | Zurich | 2006 | LX |
| TAP Portugal | Portugal | Lisbon | 2005 | TP |
| Thai Airways | Thailand | Bangkok | 1997 | TG |
| Turkish Airlines | Turkey | Istanbul | 2008 | TK |
| United Airlines | United States | Chicago, Cleveland, Denver, Guam, Houston, Los Angeles, Newark, San Francisco, Tokyo, Washington, D.C. | 1997 | UA |

Source: Adapted from Dunn (2015, pp. 40-45)

## Appendix C: SkyTeam member airlines

| Airline | Country | Hubs | Member Since | IATA |
|---|---|---|---|---|
| Aeroflot | Russia | Moscow | 2006 | SU |
| Aerolíneas Argentinas | Argentina | Buenos Aires | 2012 | AR |
| Aeroméxico | Mexico | Mexico City & Monterrey | 2000 | AM |
| Air Europa | Spain | Madrid | 2007 | UX |
| Air France | France | Paris | 2007 | AF |
| Alitalia | Italy | Rome | 2001 | AZ |
| China Airlines | Taiwan | Taipei | 2011 | CI |
| China Eastern | China | Shanghai | 2011 | MU |
| China Southern Airlines | China | Beijing, Guangzhou | 2007 | CZ |
| Czech Airlines | Czech Republic | Prague | 2001 | OK |
| Delta Air Lines | United States of America, Netherlands, and Japan | Minneapolis, Detroit, Memphis, Tokyo, Amsterdam, Cincinnati, Atlanta, New York & Salt Lake City | 2000 | DL |
| Kenya Airways | Kenya | Nairobi | 2007 | KQ |
| KLM | Netherlands | Amsterdam | 2000 | KL |
| Korean Air | South Korea | Seoul | 2000 | KE |
| Middle East Airlines | Lebanon | Beirut | 2012 | ME |
| Saudia | Saudi Arabia | Jeddah, Dammam & Riyadh | 2012 | SV |
| TAROM | Romania | Bucharest | 2010 | RO |
| Vietnam Airlines | Vietnam | Ho Chi Minh City, Hanoi | 2010 | VN |
| Xiamen Airlines | China | Xiamen | 2012 | MF |
| Garuda Indonesia | Indonesia | Jakarta | 2014 | GA |

Source: Adapted from Dunn (2015, pp. 40-45)

## Appendix D: oneworld member airlines

| Airline | Country | Hubs | Member Since | IATA |
|---|---|---|---|---|
| Air Berlin | Germany | Berlin, Düsseldorf & Palma de Mallorca | 2012 | AB |
| American Air-lines | United States | Dallas, New York, St. Louis, San Juan, Miami & Chicago | 1998 | AA |
| British Airways | United Kingdom | London | 1998 | BA |
| Cathay Pacific | Hong Kong | Hong Kong | 1998 | CX |
| Finnair | Finland | Helsinki | 2000 | AY |
| Iberia | Spain | Madrid | 2000 | IB |
| Japan Airlines | Japan | Tokyo & Osaka | 2007 | JL |
| LAN Airlines | Chile | Santiago | 2000 | LA |
| Malaysian Air-lines | Malaysia | Kuala Lumpur | 2012 | MH |
| Qantas | Australia | Sydney & Melbourne | 1998 | QF |
| Qatar Airways | Qatar | Doha | 2013 | QR |
| Royal Jordanian | Jordan | Amman | 2007 | RJ |
| S7 Airlines | Russia | Moscow (Domodedovo), No-vosibirsk, Irkutsk | 2010 | S7 |
| SriLankan Air-lines | Sri Lanka | Colombo | 2014 | UL |
| TAM | Brazil | São Paulo, Rio de Janeiro, Bra-silia | 2014 | JJ |

Source: Adapted from Dunn (2015, pp. 40-45)

## Appendix E: Gulf carrier overview

| | Emirates | Etihad Airways | Qatar Airways |
|---|---|---|---|
| Founded in | 1985 | 2003 | 1993 |
| Revenue | $25.3bn | $9.02bn | $9.79bn |
| Operating profit | $2.56bn | $0.259 | $0.84bn |
| Destinations | 151 | 117 | 150 |
| Countries served | 80 | 68 | 75 |
| # of passengers | 51.9m | 17.6m | 26.6m |
| Capacity (ASK) | 333.7m | 104.8m | 151.9m |

ASK = Available seat kilometer

Source: Emirates (2016a); Etihad Airways (2015, 2016a); Qatar Airways (2016)

## Appendix F: Case study material overview

| Source[*] | Type | Content summary and case relation |
|---|---|---|
| Al-Kibsi et al. (2007) | Mag | Economic information on the gulf states to show the advantages of the gulf states compared with other states |
| Amey (2015) | NP | Reliability ratings of various carriers to derive the young fleet age of the gulf carriers and Qatar as the most reliable airline |
| Baker (2015) | NP | Comments on Etihad Airways' view of alliances and its equity partner alliance to get information on the feeder traffic Etihad Airways can access through its equity partner alliance |
| CAPA (2013) | IA | Analysis of Etihad Airways' acquisition of Swiss regional carrier, as a way to access feeder traffic without being member of a global airline alliance |
| CAPA (2014) | IA | Unit cost analysis of Emirates, IAG & Virgin, to show competitive advantages of Emirates and the gulf carriers |
| CAPA (2015) | IA | Overview of the gulf carrier's passenger intake from airports in the UAE and around the world, to compare the three gulf carriers |
| Cronin and El Gazzar (2015) | NP | Citation of Emirates' president Tim Clark on airline alliances to emphasize the concern that joining a global airline alliance would be a threat to Emirates' flexibility |
| Dunn (2015) | Mag | Yearly overview of alliance and joint venture evolvement in the airline industry, including changes to the existing member base to get an overview of the cooperation of the gulf carriers and their established codeshare agreements |
| Emirates (2012) | Pres | Statement on allegations of the gulf carriers with regards to governmental subsidies in order to take both sides into account (as compared to i.e. Partnership for Open & Fair Skies (2016)) |
| Emirates (2015a) | PR | New, ambitious, fleet retirement schedule of Emirates keeping average fleet age low to show difference in fleet age between Emirates and other carriers |
| Emirates (2015b) | PR | Emirates' financial performance, showing it made a profit for 27 consecutive years, to provide quantitative support for high growth rates |
| Emirates (2016a) | AR | Financial and corporate information on Emirates to get information on fleet age and provide quantitative support for high growth rates |
| Emirates (2016b) | Web | Emirates' corporate history, summarizing the time from foundation to today, used in the introduction of the case narrative |
| Emirates (2016c) | Web | Emirates' corporate history, summarized in important milestones, used in the introduction of the case narrative |
| Etihad Airways (2016b) | Web | Corporate profile with information on the Etihad equity partners, to develop a basic idea about the airline and to be used in the introduction of the case narrative |
| Etihad Airways (2016c) | Web | Corporate profile with information on vision, awards and partners, to develop a basic idea about the airline and to be used in the introduction of the case narrative |
| Etihad Airways (2016d) | Web | Customer advantages of the Etihad equity partner alliance for number of destinations and gaining deeper understanding of the alliance itself |

| | | |
|---|---|---|
| Heasley (2010) | NP | Statements of Emirates' SVP Vaughn on the airline and its position towards alliances, suggesting possible negative impacts of alliance membership for Emirates |
| IATA (2014) | Web | Overview of the last 100 years of commercial flight with critical milestones, to detail the protectionist barriers and ongoing deregulation of the airline industry |
| Kingsley-Jones (2014) | Mag | Analysis of alliance opportunities and Qatar Airways' motivation to join oneworld, to provide the suggested cumulative 135% year-over-year growth of interline revenue secured for the membership of oneworld for all member airlines |
| Lohade (2015) | NP | Analysis of Emirates' quarterly report and the influence of lower fuel costs, as well as the proximity to oil production |
| Mouwad (2015) | NP | Citation of Etihad's CEO Hogan and comparison of Etihad to other airlines, to show the perceived risk of partner dependency |
| oneworld (2016) | Web | Introduction to oneworld with information on the benefits for customers and member airlines |
| Parker and Kerr (2013) | NP | Article on the rapid expansion of Emirates and the other gulf carriers, their cost advantages, strategy and other supporting factors |
| Pitas and McKay (2016) | NP | Information on Qatar Airways' purchase of IAG equity stake, raising it to 15.01 percent, to quote CEO Al Baker on future plans of expanding equity ownership within the EU's limit of a 49% stake for foreign investors |
| Qatar Airways (2013) | PR | Announcement of Qatar Airways' new oneworld membership, to be used as company statement with general reasons for the decision to ally and potential future benefits of the cooperation |
| Rapoza (2014) | Mag | Analysis of the gulf states' airline alliances and their advantages in the aviation market with references to Emirates' cooperation with Qantas |
| Schaal (2015) | NP | Interview with Etihad CEO Hogan on disrupting alliances and the passenger experience to differentiate the Etihad equity partner alliance from the global airline alliances |
| The Peninsula (2015) | NP | Information on the first oneworld operations conference, hosted by Qatar Airways to show its interest in creating synergies and sharing knowledge |
| Wall and Ostrower (2015) | NP | Information on the dispute between Qatar Airways and American Airlines and Qatar's threat to exit the oneworld alliance to provide a recent example of the risks of alliances |

* = Publication date in brackets; AR = Annual report; IA = Industry analysis; Mag = Magazine article; NP = Newspaper; PR = Press release; Web = Corporate website

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